REPORT ON THE INTRODUCTION OF THE GOLD-EXCHANGE STANDARD

into

China, the Philippine Islands, Panama, and Other Silver-Using Countries

and on the

STABILITY OF EXCHANGE

Submitted to the Secretary of State, October 22, 1904, by the Commission on International Exchange

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WASHINGTON
GOVERNMENT PRINTING OFFICE
1904

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LETTER OF TRANSMITTAL.

To the Senate and House of Representatives:

I transmit herewith the final report of the Commission on International Exchange, constituted under the authority of the act of March 3, 1903, in compliance with the requests of the Governments of China and Mexico.

The work of the Commission has assisted greatly in the establishment of the new monetary systems of the Philippine Islands, Mexico, and the Republic of Panama. The work done in China has, from the letter of the Prince of Ch'ing, the head of the Executive, been very helpful to that Government. Such improvements in the monetary systems of the silver-using countries bring them into closer connection with the gold-standard countries and are of very great benefit to the trade of the United States, and every effort should be made to encourage such reforms.

The attention of Congress is invited to the accompanying report of the Acting Secretary of State, whose request for a suitable appropriation for carrying on this valuable work in the manner which seems to him most practicable I heartily indorse and recommend to your favorable consideration.

THEODORE ROOSEVELT.

THE WHITE HOUSE,
January 26, 1905.

LETTER OF SUBMITTAL.

The PRESIDENT:

I have the honor to submit herewith the final report of the Commission on International Exchange, constituted under the authority of the act of March 3, 1903, and continued last year by means of a special appropriation. The chief purpose of the Commission was to bring about, as far as possible, a fixed relationship between the moneys of the gold-standard countries and the silver-using countries. This result could be accomplished chiefly by the establishment in the silver-using countries of new monetary systems on the gold exchange basis, the new silver and copper coins in those countries being given a fixed value in terms of gold.

The work of the Commission, considering the difficulties of its task, has been on the whole very successful. The new monetary system in the Philippine Islands, established under act of Congress approved March 2, 1903, which in the main has furnished the model for the further work of the Commission, was in operation, but serious difficulties were met with in the transition from the old currency to the new. A member of the Commission was sent to study the situation and counsel with the Philippine Commission regarding these conditions. Two measures were passed by the Commission, the results of which were immediately beneficial, so that within three months after they went into full effect the new coins were in great demand and the new currency system of the islands was firmly established upon the new basis.

Since the report of the Commission on International Exchange was presented to this Department the Republic of Mexico has passed a law carrying out the purpose announced by her Government in seeking the cooperation of the United States to establish a stable currency system for that Republic. This action was a natural sequence of the measures taken by the Commission on International Exchange while in Europe and by Mexico at home to facilitate the transition from the previous system of fluctuating exchange to one which would promote her trade with the United States and other gold-using countries. The beneficial effect of this law has already been felt in the exchanges between Mexico and New York. The giving to its

silver coins a fixed value in terms of gold has been rendered much easier by the relative stability during the last year of the price of silver bullion. This relative steadiness has been brought about largely by the regularity of the purchases of the silver needed by the Government of British India, which method of purchase was suggested by the Commission on International Exchange.

The Republic of Panama had a silver currency of which the value, measured in gold, constantly fluctuated. Inasmuch as great expenditures would need to be undertaken in connection with the building of the canal, and as losses and confusion in making contracts would inevitably be incurred by the Government under such a system, it seemed extremely desirable, if not essential, that that country be placed upon the gold basis. On the suggestion of the Commission on International Exchange, the matter was taken up by our Government with the Government of the Republic. The result was the establishment of a new monetary system for the Republic of Panama in accordance with the terms of an agreement with the United States along the lines recommended by the Commission. It will now be feasible for the United States Government, in its financial operations in connection with the building of the canal, to employ this new currency, thereby avoiding the risks which would come from fluctuations in the price of silver, while meeting local conditions by a currency similar to that which the people have for many years been accustomed.

In conjunction with the Republic of Mexico the Government of China at the beginning of 1903 also requested the assistance of the United States in the same direction. In consequence, after the commission had consulted the European governments, one of its members, Mr. Jenks, was sent to China to report the results and to give to the Chinese Government any further assistance which it might desire. The commissioner was received with cordiality. Every facility for investigation of the local conditions in China was given him, and the Chinese Government appointed a commission to study the question. The difficulties before the Chinese Government in the establishment of its new monetary system are of course enormous. Time will be needed to enable it to accumulate a sufficient gold reserve; to persuade provincial authorities to give up their present custom of independent coinage; to change the habits of the people regarding the use of bullion; to provide for proper expert assistance, and to overcome other difficulties. Yet before the commissioner was compelled to leave China, under the limitations of the act of Congress of last year, the opinion was freely expressed that very much had been done toward hastening the complete accomplishment of the desired reform. Prominent officials connected with the monetary system expressed favorable opinions, and the Prince of Ch'ing, the

head of the Executive Government, stated in a letter to the commissioner, transmitted with this report, that their monetary reform, they were convinced, must in the main follow the lines suggested by the American Commission.

The movement toward the fixing of the rates of exchange between the gold and silver countries is one of great importance to the development of our international trade. The great difficulties in the establishment of such a system as the one proposed are by no means underestimated, but they have been overcome in different countries and can be overcome in China. Certainly nothing else so feasible as the American plan has been anywhere proposed. In spite of difficulties which may attend any such plan, it tends to remove obstacles to our export trade directly and to a still greater extent to stimulate it indirectly by promoting the building of railways and the extension of internal commerce in the countries adopting a stable system. This effect is already being felt upon the introduction of American capital into Mexico; and similar effects, it is probable, would be felt in China with the adoption of similar measures. The work in China should therefore be persistently carried on until the new system is firmly established. As opportunity offers the matter should be brought to the attention of the South American States and to other countries whose monetary systems are not established on a sound basis.

It is recommended that an adequate appropriation be put by Congress at the disposition of this Department, for the continuation of this work in such manner as it may think proper.

Respectfully submitted.

FRANCIS B. LOOMIS,
Acting Secretary of State.

DEPARTMENT OF STATE,
Washington, January 26, 1905.

GOLD STANDARD IN CHINA AND PANAMA.

REPORT OF THE COMMISSION.

WASHINGTON, D. C., *October 22, 1904.*

SIR: The Commission on International Exchange begs leave to submit herewith its report on the work done and the results accomplished since its previous report of October 1, 1903, together with supplementary material explanatory of its work and of the general subjects which, under your instructions, it has had under consideration.

The work done during the last year covers especially certain investigations and suggestions in connection with the reform of the monetary system of China, the currency of the Philippine Islands, and the establishment of a new monetary system in the Republic of Panama.

There are submitted herewith also some data showing a tendency toward greater stability in the price of silver bullion, apparently as a result of the direct action of governments with whom this Commission conferred last year, especially of the British Government in connection with the currency of India. This has in itself tended to produce greater stability of exchange, and thus to diminish one of the obstacles to trade between the gold countries and the silver-using countries which was the occasion of the appointment of the Commission.

After its return from Europe in September, 1903, as explained in its previous report, the Commission designated Mr. Jenks as its representative to go to China to present to the Imperial Government a report on its work in Europe, and, in accordance with the request of that Government, to render it any further assistance that it might desire. The President approved the suggestion, and Mr. Jenks received special instructions for his work in the Orient. Inasmuch, however, as the new Philippines currency was not yet fully in operation, and certain questions regarding the currency law were under consideration by the Philippine Commission, it was thought best that, before taking up his work in China he should visit the Philippines, in order to lay before the government there suggestions regarding their money system which had grown out of the discussions in Europe as well as to gather the results of experience in the Philippines which were likely to prove of service to the Chinese Government in the establishment of its system.

THE WORK IN CHINA.

The best assistance which could be rendered to China in response to her request, it was thought, was to cooperate with her in every way possible to adopt the wisest plans for the establishment of a new monetary system of her own, based upon a fixed gold value.

In order to present the general ideas of the Commission on International Exchange on this subject to the Chinese Government and people as a basis for discussion, a pamphlet was prepared setting forth the main points of its plan as worked out in discussions with the European government experts, with the reasons for making the suggestions. This pamphlet, printed in both English and Chinese, with the approval of the Imperial Government of China, and in part by its aid, was widely distributed among the officials and most important business men of China. Some of the Chinese papers reprinted the pamphlet in full, while other papers there, both native and foreign, reprinted extracts from it as well as brief articles covering special points which were especially prepared for this purpose by the commissioner.

As soon as his credentials were presented to the Government at Peking, Mr. Jenks asked permission before taking up the detailed consideration of the subject with the Imperial Government, to spend some time in visiting the more important treaty ports as well as some of the interior provinces, in order to study business conditions. The Imperial Government not merely gave its consent, but notified officials along the route chosen regarding the intended visit and aided the commissioner in every way possible in making his observations. The special purposes in mind in this study were:

First. To secure a general view of monetary conditions in China and of the methods of doing business under the various conditions found in different provinces. In the interior many days were passed in localities where no money is employed excepting copper cash and chunks of silver (*sycee*) which have to be weighed out by scales which each dealer or traveler keeps for the purpose. As opportunity offered, conversations were held not merely with officials of all ranks, but also with bankers, merchants, and even with day laborers, local traveling peddlers, roadside workmen, etc. In this way a reasonably accurate idea was secured of the methods of conducting business without any generally recognized currency and of the probable ability of the people of all classes to deal with a new and uniform money.

Second. Conference with the officials from day to day, both those of high rank, such as viceroys and governors, and those of lesser rank, such as local district magistrates, gave an opportunity to estimate the

qualifications of those in whose hands would need to be placed to a greater or less extent the administration of the new system when it should be adopted.

Third. The attitude of the people of various classes, officials, business men, and common people, toward a change in the system and toward the new monetary system suggested, was ascertained.

Fourth. Opportunity was offered to explain in part the main points of the system proposed to the viceroys and other leading men, officials, bankers, merchants, etc., so that thus valuable criticism of the plans from the point of view of those familiar with local conditions was secured, and in many cases opportunity was offered to remove from the minds of those who did not understand the purpose of the invitation of the Chinese Government or its attitude toward the United States in this matter the natural suspicion regarding the motive of the United States in undertaking this work; and, furthermore, objections which would naturally occur to those not familiar with the administration of currency systems, were overcome.

These inquiries covered the inland territory between Peking and Hankow on the Yangtse River, a typical part of the interior of China, which is removed from direct foreign trade; the Yangtse River from Hankow to Shanghai, with visits to the two most important trading posts on the river; a visit to Shanghai, Canton, and Tientsin, the three most important treaty ports on the coast; as well as discussions with the governors at Soochow and Hangchow, the capitals of two very important provinces, and interviews with the customs taotais at Amoy and Chefoo, important ports in two other provinces. The subject was thus discussed with the governors or viceroys of ten, and with high officials of twelve out of the eighteen provinces of China. At Shanghai, too, the subject was discussed in detail in several meetings with the treaty commissioners who have represented China in framing the important commercial treaties recently negotiated with Great Britain, the United States, and Japan.

The results of these investigations and discussions were that many new ideas regarding conditions in China and what was practicable for China were secured; that in many cases misconceptions regarding the nature of the reform and of the plans under discussion were removed, and that the experience secured and the knowledge gained enabled the commissioner to understand much more readily the attitude of the higher Chinese officials toward their old system and the proposed new system.

On his return to Peking the subject was taken up for detailed discussion with the Imperial Government. As a result of the treaties with Great Britain, the United States, and Japan, it has been the intention of the Chinese Government to establish a uniform monetary system, and for the purpose of working out plans for that system, as

well as for meeting the United States commissioner, a commission had been appointed consisting of the members of the board of revenue and several other officials, some of high and some of lesser rank. Some of these had been especially designated to have charge of the new mint and to devote their time to the consideration of monetary affairs.

It was found that as a result of discussions in connection with the treaty with Great Britain, of various resolutions passed during the two or three preceding years by foreign chambers of commerce in China, of arguments presented in the newspapers, and of their own study of the question, the Chinese Government officials had apparently informally, although not at all officially, reached the conclusion that they wished ultimately to place their system of currency on the gold basis, but that at present they would establish a uniform silver and copper currency without definite plans for reaching the gold basis. Although the commissioner was treated throughout with the greatest courtesy and consideration, it seemed at first as if the officials with whom he had to deal at Peking, though interested in the general subject had, relatively speaking, slight interest in the specific plans proposed by the Commission on International Exchange. As the discussions went on, however, and as from the work of both the Chinese and American commissions the disadvantages and difficulties became more apparent of starting on a silver basis without clean-cut, definite plans for the change to the gold basis, and on the other hand, the advantages of having the new coins placed on the gold basis from the beginning, both from the point of view of financial gain to the treasury and benefit to the business interests of the country, keen interest on the part of the Chinese commissioners was clearly awakened. In fact, before the close of the discussions the Chinese commissioners themselves said that from this work not merely had their views to a considerable extent changed, but that their whole interest in the plans of the American Commission had greatly increased.

The decision of any question of this importance in China is finally made by the Emperor on the advice of the grand council. The opinion of the grand council, however, is determined to a great extent, of course, by the high officials in the Government who have especially to do with the subject under discussion; and in this instance the responsibility for the recommendations which would doubtless prove conclusive, rested chiefly upon the Chinese president of the board of revenue, His Excellency Lu Chu'an Lin, together with their Excellencies the Manchu president, Yung Ching, and Na Tung, the distinguished official who had been designated the year before to report on the monetary system of Japan. Naturally the opinion of the senior president of the board of revenue would be of the greatest influence. His excellency, an official of ripe years and of extended experience in various high official positions, a man of upright and

most positive character, had apparently reached the conclusion that the wisest plan for the Empire was to begin on a silver basis in the hope of ultimately reaching the gold standard; but the plan for the change to the gold standard had not been fully worked out by him or by others in the commission. As there was relatively little opportunity for direct discussion with the president of the board of revenue on account of his absence at the summer palace in attendance on the court, as well as from the pressure of his other duties (since, in his judgment, the matter was already settled), it seemed, until shortly before the American commissioner was compelled to leave China on account of the limitation of the life of the commission imposed by Congress, that the plans of the commission would probably not be adopted or even thoroughly considered by the Imperial Government in the most important matter of all—the prompt establishment of the gold basis—although in numerous minor particulars, even some of considerable importance, the opinion was freely expressed by the officials that they would accept the American suggestions.

At length, however, his excellency the president of the board of revenue, was transferred to the presidency of the board of works and a new president of the board of revenue was appointed. His Excellency Chao Erh Hsün, the new president of the board of revenue, manifested immediately a great interest in the plans under discussion and himself personally honored the American commissioner by meeting him repeatedly day after day for the discussion of the subject. Before Mr. Jenks was compelled to leave Peking for America, the opinion was expressed by several of the high Chinese officials whose positions would place heavy responsibility upon them in connection with the money system, that the American plans were practical if the cooperation of the viceroys of the more important provinces could be secured; that the Chinese Government could, if it seemed advisable, secure the financial means necessary for the carrying out of the reform; and that there would be no infringement of the sovereignty of the Empire or danger to its integrity or usefulness in the employment of such foreign expert aid as might be required for the establishment of a system in accordance with the American plan.

The commissioner was assured also by different governors, viceroys, and commissions, that the American plans would have their support, and some of the highest officials in Peking are of the opinion that in a number of instances, at any rate, the support of the local authorities will be heartily given to the central Government if it undertakes these plans. A favorable judgment regarding the attitude of the Chinese Government seems to be quite general also among those foreign residents most experienced in Chinese affairs. The general opinion seems to be well represented by Mr. Conger, the min-

ister of the United States, in his letter to the Department of State, as follows:

I have the honor to report that Professor Jenks left Peking for home on the 27th instant.

His task was a very difficult one, and at first the prospects were rather discouraging, but by patience, persistence, and clever presentation of his unsurpassed knowledge of the subject, he has made great progress. He has practically brought the Chinese Government to believe that his plan is the correct one, and ought, if possible, to be adopted; yet they greatly fear that so radical a change in their financial system can not at present be carried out by a government which has so little real power over its separate provinces. However, they have promised to at once consult the leading viceroys and governors and see what can be done; but whether or not Professor Jenks's plan is adopted, his instruction and advice will aid the Chinese Government greatly in its efforts to adopt a uniform currency as required by the recent treaties, and his further assistance is most likely to be solicited by them.

Professor Jenks has been treated with the greatest respect and consideration by the Chinese officials. They feel that he has been of great service to them, and it is certain that much good will result from his mission, for all of which he deserves great credit.

Doctor Morrison, the experienced, impartial correspondent in Peking for many years of the London Times, on the departure of Mr. Jenks from Peking, cabled to his paper as follows:

PROFESSOR JENKS'S MISSION ENDS—CHINESE GOVERNMENT IMPRESSED BY HIS GOLD-STANDARD ARGUMENTS.

PEKING, *August 29.*

Professor Jenks, of Cornell University, the commissioner delegated by the United States to confer with the Chinese authorities regarding the suggested introduction of the gold standard in China, left Peking yesterday on his return to America.

He has been in China since January, and has been treated with exceptional honor. His mission was purely educational and not political. With untiring patience Professor Jenks has been demonstrating to the Chinese the necessity reforming their currency and the immense gain that would follow the establishment of the gold standard.

Undoubtedly his mission left its mark. The Chinese Government is beginning to realize the vital importance of the question, and it is regrettable that Professor Jenks should be compelled to return to America when his work is only beginning, for experience teaches that between Chinese expression of approval of a reform and its actual introduction the distance often is considerable.

Mr. Robert Little, the veteran editor of the North China Daily News and the North China Herald, for many years the most important foreign publication in China, writes in the North China Daily News, September 8, 1904, as follows:

CURRENCY REFORM IN CHINA.

Prof. J. W. Jenks left Shanghai yesterday for the United States in the *Mongolia*, and we are glad to know that he leaves these shores with the satisfactory conviction that his mission has not been altogether in vain. He has

planted—it is for others to water, and the increase will come. Thoroughly conversant as he is with his subject on every side, a clear and cogent writer, a very able speaker, and a man of winning personality, he was the best choice that the United States Government could possibly have made when the Chinese asked for a commissioner to advise them how they might best obviate the loss which the continuing depreciation of silver was causing. His plan, as is generally known, is the adoption of the gold standard without a gold currency, to put it as concisely as possible, and he has found the statesmen of Peking, as well as the high provincial officials, with whom he has discussed the question in all its bearings, eager to listen to him, to understand, and to adopt in due time his suggestions. Many foreigners, too, who were first indisposed to believe that the adoption of the gold standard by China was anything but an impossible dream, have been convinced by his arguments; and there is good reason if nothing untoward happens, to believe that something like the reform which has been so unexpectedly and promptly successful in the Philippines, will be adopted by China before long. Thus China will come into line with India, the Straits, the Philippines, and Japan, to the permanent advantage of all who do business with gold-standard countries. And mainly to the suave, unassuming, but thoroughly earnest professor of Cornell University, with his unexcelled mastery of facts and figures, this great and beneficial reform will be due. And there will be a general hope that circumstances will enable him to return to China and give his advice and assistance to those who will be charged with putting his recommendations in action.

Of still greater import is documentary testimony from Chinese sources, besides the favorable opinions referred to above which have been expressed informally by business men and officials. The Chinese commercial union of Hongkong took formal action. The president of this association (an active member of the Chinese chamber of commerce), Mr. Feng Wa Chun, wrote to the American commissioner on the 13th of August, 1904, stating that—

A meeting of a committee of that institution was * * * held on the 7th instant, when it was unanimously agreed that it would be to the interest of China to adopt a gold standard, and that the Chinese residents of this colony would hail such a step with gratification, inasmuch as it has been held that Hongkong can not go "gold" so long as China's currency remains unchanged.

The letter concludes with the hope that the American commissioner's mission will meet with the success it deserves.

More important still, of course, is the official statement from the Chinese Government itself. The Prince of Ch'ing, the president of the grand council, who represents officially the Chinese Government, in response to a request for a definite statement of his opinion to be presented to the President of the United States, wrote to Mr. Jenks, on the eve of his leaving Peking, as follows:

I have the honor to state that your excellency having been commissioned by your government at this time to come to China, I found myself after conversation with you in hearty accord with your ideas, and having read the various papers and memoranda which you have prepared, I note that they are all exhaustive in their discussions, and set forth plans covering all details, for all of which how can I sufficiently express my gratitude. As to your suggestions regarding

the adoption of a uniform monetary system, all are of great importance. China is just now considering the matter of deciding upon a new coinage system and is deliberating as to the establishment of a national bank, and it is most necessary that she should follow your plans and that all those measures which need most urgently to be taken up just now in accordance with those plans should at once be put into execution with earnestness and promptitude. As to the rest, it will be necessary to investigate and consider the feelings of the people, and, as occasion may offer, take these matters under advisement with the expectation that the suggested measures will be developed one after the other in such a way as, I trust, will fulfill your generous wishes for us and secure a good degree of success.

Your excellency is well known in China and abroad as a financial expert, and your efforts to formulate plans in our behalf, so sincere and friendly, demand from me profound and grateful thanks.

I hear that your excellency has made preparations for your return home and that the date of your departure is at hand. Should there be occasion in the future to ask the further benefit of your instruction, I shall then write a special note to inform you.

I avail myself of the opportunity to wish you the compliments of the day.

The Commission feels, therefore, that there is every reason to believe that the mission for which it was established, to cooperate with the Chinese and Mexican Governments in establishing sound monetary systems which would fix the rate of exchange between the greatest of the silver-using countries and the gold-standard countries, has been in great part satisfactorily performed. It remains to be seen, of course, how promptly and by what methods the Chinese Government will carry out its intentions as indicated in the letter of the Prince of Ch'ing, of adopting in the main the plans of the Commission. This much, at least, is clear—that the Goverment officials who are in the positions of chief responsibility have shown the greatest courtesy and consideration toward the United States Commission; that they have shown themselves open to the fair consideration of sound arguments on this most important and difficult question, and have manifested the open-mindedness and frankness in announcing a willingness to change their opinions which is characteristic of the greatest statesmen; that the Chinese Government has the ability, financial and otherwise, if, on further consideration, it continues to have the will, to carry out with proper expert advice a good system, and that in the opinion of the best informed persons in China this intention and purpose will continue unless some hostile influence intervenes.

It is the opinion, also, of many of the best informed foreign residents in China, as well as of some of the higher of the Chinese officials, that if, under the limitations of the act of Congress, the commissioner could have remained a few months longer in China he would have had the opportunity of seeing the new system organized and of cooperating with the Chinese Government in whatever way might have seemed to it wise in the organization of the system. The Commission, however, has from the beginning taken the position that

it was doing simply what it could to comply with China's request for assistance without in any way bringing any pressure to bear upon that Government in carrying out its plans; and it is convinced that, difficult as the task before China is (and no other country in modern times in its monetary reform has had a task so difficult), the good sense and wisdom of the Chinese officials, upon whom rests the responsibility of the introduction of the new system, may be trusted to secure the best expert advice and to take the wisest means of establishing the new monetary system on a sound gold basis.

THE CURRENCY OF THE PHILIPPINE ISLANDS.

From December 23, 1903, to January 16, 1904, was spent by Mr. Jenks in the Philippine Islands and in conference with the Philippine Commission over proper measures for transition from the old currency system to the new one provided by the act of Congress approved March 2, 1903. Immediately following these conferences and public discussions of bills proposed, two acts were passed by the Philippine Commission which seem to have removed most of the difficulties in the way of the successful inauguration of the new monetary system.

It was found, as a result of experience in the islands, that many business men, especially exporters who were buying in the interior products for exportation, and the large employers of labor who expended considerable sums of money regularly in the payment of wages, as well as other people who employed labor on a small scale and purchased supplies for their daily consumption, were making use by preference of the Mexican dollars and the other local currency because it was cheaper, and they were thus hindering seriously the general use of the new coins. Moreover, under the influence of these classes in the community, whenever the rate of exchange turned slightly in favor of the islands, there was a tendency toward the reimportation of Mexican dollars which had previously been exported.

To meet these difficulties the Philippine Commission, as has been suggested, passed two laws; the first, a measure prohibiting absolutely the importation of Mexican currency, Spanish-Filipino currency, or any other metallic currency which is not upon a gold basis, with proper exception of small amounts in the pockets of travelers; the second, an act restricting after a certain fixed date in the future the use of all moneys, excepting the legal-tender currency, by imposing a tax, which was to increase in rate as the months went by, upon all checks, drafts, notes, bonds, bills of exchange, and other written contracts of every description made payable in whole or in part in the former local currency, as well as a tax upon bank deposits and upon the conduct of business of any description in the old local currency, proper exceptions being made, of course, for contracts previously entered into, deposits for the payment of old contracts,

bills of exchange, or checks or other contracts for the purpose of exporting Mexican dollars, etc.

In the Manila American of September 11, 1904, is the following editorial covering the same ground fully:

> Vice-Governor Ide, secretary of finance and justice, has given out in his financial statement for August that there is sufficient Philippine currency in circulation in the islands to meet all demands, and that the government is prepared to supply all needs in the conduct of insular commerce on the new basis.
>
> While the work of introducing the new currency has been attended by many discouragements and vicissitudes, it is remarkable how successfully the war against the fiat money has been waged and in a few months to what extent the new currency has found its way into circulation.
>
> The success attained is largely due to the fixed purpose of the Government to carry into effect the currency policy, and the fact that no avenue for the distribution of the new coin and no course for the discouragement of the old one has been overlooked in the campaign.
>
> This success is worthy of special deference, since the great mass of the people offered little or no encouragement or cooperation and rather assumed a prejudiced position against the passing of the fiat money. This prejudice is being rapidly overcome and the bright, new Conant dollar is to-day the favorite where a choice is offered, even of the most ignorant.

It seems clear, however, that no further legislation will be needed beyond minor measures to meet special needs, such as small changes in the rate of buying or selling exchange, of receiving old copper coins, etc. The government of the Philippine Islands is certainly to be congratulated upon having established in full vigor a gold-standard system adapted to the needs of the people within about a year from the time when the new coins were first introduced into the islands. Rarely has any country accomplished so great a reform so promptly and with so slight disturbance of business.

THE CURRENCY OF PANAMA.

The completion of negotiations between the United States, the French Canal Company, and the Republic of Panama for the control by the United States of the construction of the Panama Canal made it important, in the opinion of the Commission on International Exchange, that some action should be taken to insure the use of a sound currency in the construction of the canal. The matter was considered to be of considerable importance from the standpoint of the cost of the canal, because uncertainty as to the character of the currency employed would not only involve the risk of injustice in the wages paid to labor, but might add greatly to the amounts charged by contractors for services rendered in order to protect themselves against the consequences of fluctuations in the gold value of the money employed by them in local expenditures on the Isthmus. The fact that the work of constructing the canal would bring the officers and employees of the United States into frequent contact

with the citizens of Panama made it desirable also, in the opinion of our Commission, that some degree of harmony should be brought about between the currency employed in the canal strip under the control of the United States and that employed in the Republic of Panama.

The Government of Panama showed from the beginning a disposition to meet the wishes of the United States and to establish a sound currency upon the gold basis. The evils suffered under the fluctuating currency previously in circulation in Panama had already led to a large use of United States money on the Isthmus and to a strong realization of the importance of establishing a monetary system based upon gold. Several bills on the subject were pending in the Congress of Panama during the spring, but failed of enactment because of differences of opinion in regard to the rate at which the old silver currency should be converted into the new, and in regard to other details of the proposed change. The fact that the Government of the United States should interest itself promptly in securing harmony between the currency systems of the canal strip and the Republic of Panama was set forth for the first time in a memorandum regarding the currency of Panama which was submitted by the Commission on International Exchange to the Secretary of War under date of March 26, 1904, and which will be hereafter printed as an appendix to this report.

This memorandum did not undertake to decide between several different systems which were suggested, but simply to emphasize the importance of cooperation between the Governments of the United States and the Republic of Panama. Subsequently, in the latter part of April, the Commission, through one of its members, was requested by the President and Secretary of War to prepare a definite project on the subject. This project was submitted in a memorandum entitled, "Suggestions regarding the system of currency to be established in the Panama Canal Zone," which was transmitted to Secretary Taft under date of May 19, 1904. The subject was taken up actively by the Secretary of State and the Secretary of War early in June because of the pending departure of Mr. John Barrett, the minister of the United States to Panama, who desired to know what representations he should make on the subject to the Government of the Republic. As a result of several conferences at the State Department and the War Department the Government of Panama was asked to designate a commission to confer with the authorities of the United States on the subject, in accordance with the suggestion originally made by the Commission on International Exchange.

The Government of Panama promptly complied with this request by designating as its commissioners the Hon. Ricardo Arias and Dr. Eusebio A. Morales, who were already in New York in connection

with the disposition of the money paid by the Government of the United States for the canal franchise. Acting under authority of their Government and by invitation of the Secretary of War, the commissioners of Panama met several officials of the Government of the United States at the office of the Secretary of War on Saturday, June 11, 1904. There were present at this conference the Secretary of War, the two commissioners of the Republic of Panama, their counsel, Mr. William Nelson Cromwell; the minister of the United States to Panama, Mr. Barrett; the chairman of the Canal Commission, Admiral John G. Walker; the legal adviser of the Canal Commission, Judge Charles E. Magoon; the Chief of the Bureau of Insular Affairs of the War Department, Col. Clarence R. Edwards; and Mr. Conant, as a representative of the Commission on International Exchange.

The desirability of harmony between the United States and the Republic of Panama in establishing a sound monetary system on the Isthmus was forcibly set forth by the Secretary of War, and was cordially admitted by the commissioners of the Republic of Panama. A general discussion followed as to the best method of establishing and maintaining a monetary system acceptable to all parties in interest. The Secretary of War emphasized the importance not merely of establishing the gold standard, but of providing for an adequate gold reserve to protect any subsidiary silver which might be issued.. The commissioners of Panama objected to setting aside a large sum, upon the ground that the money was not available. Of the \$10,000,000 received from the United States, they stated that \$6,000,000 was dedicated by their new constitution to posterity. It was the intention, they declared, to invest this money in a permanent form and to apply only the interest to current expenditures of the Government of Panama. The remaining portion of the money paid by the United States for the Panama Canal franchise, they declared, was already appropriated for education, important public works, and similar purposes. The Secretary of War insisted strongly, however, upon the setting aside of a gold reserve to protect the subsidiary silver, if the money adopted by the Republic of Panama were to be employed by the Panama Canal Commission. The commissioners of the Republic asked time, therefore, to consult their Government on this subject, and an adjournment was taken for one week.

At the conference of June 18 the commissioners of Panama submitted a proposal that the reserve to be set aside should be 15 per cent of the face value of all the silver to be coined. It was suggested, on behalf of the Commission on International Exchange, that if so small a reserve were provided it should at least be strengthened by the addition of the seigniorage profits on the coin minted from new

bullion. This proposition was supported by the Secretary of War and was accepted by the commissioners of the Republic. At a final meeting on Monday, June 20, a letter was drafted by the Secretary of War, addressed to the commissioners of the Republic of Panama, stating that he understood that a measure was pending in the national convention of the Republic, conforming in its general terms to the plan which had already been discussed between himself and the commissioners, and that if this plan was adopted, as outlined in this letter, the War Department would agree to employ the currency of the Republic on the Isthmus and to cooperate with the Government of Panama in so arranging drafts upon the canal funds in the United States as to prevent excessive fluctuations in exchange. This proposal was accepted by the commissioners of Panama on behalf of their Government, and an act was approved by the President of that Republic on June 28, 1904, embodying this agreement.

The substance of the plan agreed upon between the commissioners of Panama and the Secretary of War was that a gold coin, to be known as the "balboa," of the same weight and fineness as the gold dollar of the United States, should be the standard of value in Panama; that the gold currency of the United States should be legal tender there; that provision should be made by the Republic of Panama for the issue of fractional silver to the face value of $1,500,000 in gold, and that upon the request of the Panama Canal Commission, if the construction of the canal showed it to be necessary, there should be executed from time to time additional coinage of fractional silver to an amount not exceeding the face value in gold of $1,500,000. Parity of all the silver coined is to be maintained by the deposit in some bank in the United States of 15 per cent of the nominal value of such coin, with the addition to such deposits of the net seigniorage on such amount as may be coined at the request of the Canal Commission.

This plan departs from the recommendations of the Commission on International Exchange and from the currency system adopted in the Philippines, in making the unit of value equal to $1 in American gold coin instead of 50 cents. The silver coins provided for, however, are nearly the same in size as those provided for in the Philippines. The largest of these silver coins will be of about the size of an American silver dollar, but will have in Panama the value of 50 cents in American gold. It will weigh 25 grams (385.8 grains) nine-tenths fine, and is therefore coined at about the ratio of 30 to 1. While it will represent 50 cents in Panama currency, instead of a complete unit of value, as in the Philippines, this coin is specifically denominated by the new law, the "peso," in conformity with the existing coinage in circulation on the Isthmus, of which the peso is the unit, and whose present gold value, while fluctuating with the

price of silver bullion, is only a little below 50 cents in United States gold. Thus, while the American dollar has become the standard of value, the local subsidiary currency is so nearly adjusted to old conditions that prices and wages will not be affected in the drastic manner in which they might be by the adoption of a subsidiary coinage exactly the same as that of the United States.

The commissioners of the Republic of Panama have already made arrangements for the execution of proper dies for their new coinage by the officials of the United States mint at Philadelphia. A part of their new coinage will soon be executed, but it will not be necessary for the Canal Commission to use a large quantity on the canal work until the surveys have been more nearly completed and contracts actually made for the execution of the work. By that time the coinage agreed upon for the Republic will probably be completed, and the officers of the United States will be in a position to determine whether additional amounts of subsidiary silver will be required to provide an adequate circulating medium under the agreement made with the Secretary of War.

STABILITY OF EXCHANGE.

The essential object for which the present Commission was appointed was referred to by the President of the United States, in his message to Congress, as being to procure " such measures as will tend to restore and maintain a fixed relationship between the moneys of the gold-standard countries and the silver-using countries." Of the several measures to secure this object which have been considered by the Commission the one most important and most permanent in its influence has been, in their opinion, the adoption of the gold exchange standard in silver-using countries. Incidentally, however, it is obvious that any measure which should tend to promote stability in the gold value of silver bullion would tend to check the fluctuations in exchange between gold and silver countries, which have been so disturbing to commerce for a generation and which proved especially demoralizing to the commerce of China and Mexico during 1901, 1902, and the spring of 1903.

As pointed out by this Commission in its report of last year, the exchange between gold and silver countries now depends fundamentally upon the fluctuations in gold price of silver. Any step contributing toward stability in the price of silver bullion would, therefore, in itself tend to diminish the fluctuations of exchange, independently of the more important object of separating the monetary systems of the silver-using countries from the silver standard and placing them on the gold standard. Some misunderstanding of the objects of the Commission in this regard seemed to arise in some

quarters because of failure to distinguish between efforts previously made to raise the price of silver and the efforts made by this Commission to promote stability in the price. Stability in the price of bullion is important because it carries with it comparative stability in exchange. In order, therefore, to prevent paralysis of trade between the silver-using countries and the gold countries, the Commission on International Exchange suggested to the European powers with whose representatives they consulted, an effort to reduce the violent fluctuations in the bullion market by making such purchases of silver as are actually required for coinage purposes with greater regularity. As shown in our previous report, the soundness of this principle was generally recognized by the governments with whom consultations were held.

It is gratifying to report that this policy had borne fruit in diminishing fluctuations of exchange between gold-standard countries and silver-using countries. The most important influence exerted in this respect has been by the council for India, at London, in making its purchases of silver bullion to meet the coinage demands of British India. A letter from Sir James Mackay, a member of this council, to the chairman of this Commission, states:

> I think you will observe from the prices which the Secretary of State for India paid for the silver which he bought that regularity has, as far as possible, been observed, so as to prevent extreme fluctuations.
>
> Considering that the value of the silver bought by the Secretary of State since the 6th of March, 1900, up to the end of September, 1904, has amounted to twelve millions sterling, the variation in prices has, I think you will see, been extremely small.

The figures presented by Sir James Mackay give only the average price paid for different lots of silver purchased. They show that while the prices paid in 1903 and 1904 were lower than those paid in 1900, the differences between the average maximum and minimum prices were less. The lowest average price paid in 1903 was $23\frac{3}{32}$ pence between December 12 and December 19; the highest average price for a given purchase was $27\frac{1}{64}$ pence between September 15 and October 2, 1903. The average of the prices paid during the period from September 15, 1903, to February 20, 1904, representing the purchase of 35,652,935 ounces, was $26\frac{5}{64}$ pence. Purchases were then suspended until May 2, 1904. The average price for 18,300,644 ounces purchased between that date and August 27, 1904, or nearly four months, was $26\frac{1}{64}$ pence or about two-thirds of a penny less than the average for the previous series of purchases.

The figures just presented of the purchases for the coinage of British India show a steadiness in the price of silver which has been rare during the past decade. They are not absolutely conclusive, because

REPORT OF JEREMIAH W. JENKS, COMMISSIONER DESIGNATED BY THE COMMISSION ON INTERNATIONAL EXCHANGE, WITH THE APPROVAL OF THE PRESIDENT, TO CARRY ON THE WORK OF THE COMMISSION IN THE FAR EAST.

After the return of the Commission on International Exchange in the fall of 1903 from the work in Europe, as explained in detail in the earlier report of the Commission, I was designated by the Commission to continue its work in the Far East. Acting under special instructions issued by the Secretary of State, October 24, 1903, as printed on page 97 of the previous report, the work was entered upon immediately.

JAPAN.

On my arrival in Japan a special commission of twelve members, with Mr. Sakatani, the vice-minister of finance, as the chairman, was appointed to discuss in detail the plans of the American Commission. The other members of the Commission consisted of the presidents of the Bank of Japan and of other leading banks of the country, together with representatives of the departments of foreign affairs, finance, commerce and industry, agriculture, etc. A more representative business commission or one with a stronger personnel could not have been selected. The names of the members, with their positions, as well as the formal resolutions which they adopted at the close of the conferences are printed on page 162 of the preceding report. The following paragraph from that report should be reprinted here:

"In view of the present condition of China, it is too much to expect that the currency can be started at once on a perfect system, and as it is considered highly disadvantageous to delay the said reform on that account, it is advisable to adopt the suggestions of the American Commission as a matter of expediency. But it must be admitted that the utmost skill and care are needed to overcome the great difficulties which necessarily accompany the operation of the system."

It will doubtless aid in understanding the situation in the Far East, and the nature of the difficulties which the American Commission had to overcome in order to secure the approval of its plans, to indicate, in brief, the nature of some of the discussions held in Japan.

The commissioners appointed by the Japanese Government seemed at first somewhat divided in their opinions. One group was strongly inclined to agree with the conclusions of the English commission and

to recommend that China adopt, in the first instance, a uniform monetary system on a silver basis, leaving the question of its establishment on a gold basis for the future, with the understanding, nevertheless, that it would be desirable for the country to reach the gold basis as soon as that might be practicable. The arguments used to support this view were not urged strongly, but were apparently the same in substance as those heard in Europe and were simply to the effect that China did not have a gold reserve and that it would be difficult for a gold reserve to be secured within a brief time. It was further urged that the adoption of a system on a gold basis would require more skilled financiers than China possessed, and that there would probably be practical difficulties in persuading China to engage proper foreign help and give to such foreigners a sufficient degree of discretion.

Others of the commission thought it would be wiser for China to adopt a monetary system with a gold basis from the beginning. Their idea was, however, that there should be no half-way measures, but that the new coins issued by China or the national-bank notes issued by a new Chinese national bank to be established should be redeemable in gold within the country itself at the option of the holder of the notes or of the silver coins.

While these views were indicated and incidentally outlined through questions and discussions, the main part of the time was taken up by the commission in listening to the plans of the American Commission, and in questioning and discussing the difficulties and merits of those plans. The commission consisting largely of bankers, special emphasis was naturally laid upon the questions which were connected with foreign exchange. The practical difficulty was emphasized of fixing a rate of exchange at which the Chinese Government treasury would sell bills on foreign countries and of having that rate somewhat above what might be considered the normal banking rate, in accordance with the system adopted in the Philippine Islands and recommended by the American Commission in Europe, as explained in the previous report on pages 130 *et seq.* A somewhat detailed discussion of this subject, however, seemed to convince the commission that if the management of the system were put into the hands of thoroughly skilled financiers, who understood the subject fully, the plan could be carried through successfully. The experience of the Philippine Islands during the last year has doubtless served to confirm the opinion of all persons familiar with the subject, that the plans of the American Commission in this regard are entirely practicable.

The difficulties which might possibly arise from an unfavorable balance of trade in China did not impress the members of the Japanese commission to the same extent as they did many of the members of the European commissions. The reason for this doubtless is that

Japan herself, under the leadership of several of these same men who were members of this commission, had succeeded in maintaining the gold standard in Japan in the face of an adverse balance of trade for several years, so that they understood thoroughly well the practical measures which it might be desirable or even necessary to take in order to secure the end desired, of maintaining unquestionably the parity. The commission in no way minimized the difficulties; in fact, the practical nature of those difficulties and the exact way in which they would arise were pointed out with a clearness and precision which was not surpassed in any of the discussions elsewhere. Possibly, however, no other country had had the same experience in this regard as had Japan, and nowhere else were the methods to be followed pointed out in quite the same detail as in the discussions in Tokyo.

It has already been noted that, at the close of the discussions, the Japanese commission adopted a series of favorable resolutions. While intimating that the single gold-standard system, like the one for example in Japan, is the end which it is desired to reach, it declared, nevertheless, that in view of the present conditions in China it is advisable to adopt the suggestions of the American Commission as a matter of expediency. Attention was of course called to the difficulties in the way and to the need of expert help of the highest quality.

This direct indorsement of the views of the American Commission and the cordial treatment of this whole subject by the Japanese Government could not fail to have a good influence upon the Chinese Government in its discussion of a question which is of so great importance in connection with the welfare of China.

THE PHILIPPINES.

The new Philippines currency for which provision was made in the Philippine coinage act, approved by the President March 2, 1903, began its circulation in the Islands July 23 of that year. As the insular treasury began immediately the payment of the Government employees and of its bills to a considerable extent in the new currency, rather large sums went without difficulty into circulation. It soon became evident, however, that for many purposes the old local currency, consisting of Spanish-Filipino dollars and of Mexican dollars, was practically as effective in purchasing power in certain directions as were the new Philippine coins, although the latter were worth \$0.50 gold and the former worth from, say, \$0.40 to \$0.45. Prices having been fixed formerly in terms of the Mexican dollar would naturally remain at the same rate unless especial effort were made to change. Inasmuch as it was more profitable for the dealers

to receive a more valuable coin, they at first allowed their prices to remain the same in the new Philippines currency as in Mexican.

In consequence of the above conditions it was found that very many of the Government officials, after receiving their pay in the new coins, were able to make a profit of from 10 to 15 per cent by exchanging these coins for Mexican and Spanish-Filipino coins and paying for their purchases of goods, and especially of provisions at the markets, in the cheaper coins. The local sellers of produce were, generally speaking, willing to sell at the old rates, although the European shops and occasionally the native shops demanded the new coins. In the latter case, however, they frequently, if not generally, attempted to get as many of them as they had formerly demanded of local dollars.

Likewise house servants and laborers in general, as well as the plantation sellers of hemp and of sugar, had not in the first four months after the introduction of the new coins learned to any very great extent the advantage that might come to them from demanding their pay in the new currency. This was the case, even though it was known by those who had kept themselves informed, that after the 1st of January, 1904, the Mexican dollars would be demonetized and no longer received by the Government. A good many individuals, however, did after the 1st of January demand the new coins, and there was a very patriotic movement on the part of very many, if not even of most Government officials and other Americans, to pay wages to their servants in these new coins at the same rates which they had formerly paid in the Mexican coins, in order to encourage the use of the new money and to help the Government.

Importers, government officials, and a good many of the merchants who felt that their interests would be largely promoted by stability in the rates of exchange very promptly changed their accounts into the new currency, and made efforts in every possible way to aid the government in the introduction of the new coins. On the other hand, exporters, whose interests were advanced by buying their goods for export in the old local currency, very generally did not change their system of accounting; and they encouraged the use of Mexican and Spanish Filipino coins to the discredit of the new currency.

It had been part of the plan formulated by the Philippines currency act that whenever bills of exchange were sold in Manila against the gold-reserve fund in New York, the new coins which were received in payment for these bills of exchange would be withdrawn from circulation, and that this withdrawal, producing a contraction of the currency, would lead to a fall in the rates of exchange in terms of the new currency. During this earlier period, however, of the introduction of the new coins, before the old local currency had become to any noteworthy extent exhausted, and also before any legal action had

been taken to prevent the importation of Mexican dollars from Hongkong and elsewhere, this selling of bills of exchange against the gold reserve in New York in order to maintain the parity of the new Philippine coins did not work exactly in the way that had been anticipated under the law, and in the way that it doubtless will work now that the old local currency is practically eliminated from circulation.

Owing in part to the very large importations of rice, in part also to the great scarcity of money in New York, which led the New York banks to wish to secure additional money for circulation in that State, there was, through September, October, and November, 1903, a strong demand for bills of exchange on New York to be paid for in the Philippines currency. It was temporarily, of course, to be withdrawn from circulation. These demands for exchange came largely from the Manila banks which had either their main offices or other branches in New York City. The readiness of the people to continue the use of Mexican and Spanish-Filipino dollars, and the ease with which Mexican dollars could be imported, made it practically impossible to contract the currency sufficiently by the sale of these bills of exchange and the withdrawal of this currency from circulation unless some further means were devised to prevent the reimportation of Mexican dollars. As a matter of fact, owing to the withdrawal of these coins paid for bills of exchange, there were actually fewer Philippine coins in circulation among the people on the 1st of January, 1904, than on the 1st of December, 1903, and by the middle of January, 1904, about half a million of Mexican dollars had been imported. Owing to the fact that the currency legislation for the Philippines was thus apparently in certain respects not working satisfactorily, and that supplementary legislation might very possibly be needed, the Secretary of War had asked the member of the Commission on International Exchange who was going to the Orient, to visit the Philippine Islands, there to take counsel with the Philippine Commission, and after study of the local conditions to make to the Commission any suggestions for legislation which seemed advisable.

In consequence, on his arrival in the Philippine Islands about the middle of December, the American commissioner entered into a detailed study of the local-currency situation with the commission, particularly with the aid and counsel of the very efficient chief of the division of the currency, Mr. E. W. Kemmerer. He visited all of the leading bankers and the heads of many of the leading business houses, and talked over the situation as fully as possible with representative business men of various classes and interests. After these investigations and detailed discussions with the members of the commission, the commission decided upon further legislative action.

In order to meet the conditions mentioned above and to make it, on the whole, less profitable to use Mexican dollars than to use the new Philippines currency, as well as also to enable the government to bring about a real contraction of the currency by the sale of bills of exchange in case of necessity, the following action was taken:

On the 31st of December, 1903, the Government passed an act providing for the demonetization of Mexican coins, and stating that they would no longer be received by the Government. Spanish-Filipino coins were to be redeemed by the Government until July 1, 1904, at a rate substantially equivalent to the buying price in Mexicans of gold at the banks, this rate to be changed from time to time by the Government, in accordance with local conditions. This act placed a valuation upon the Spanish-Filipino coins of something like 10 per cent above their bullion value. It was, however, felt to be only fair to the people to enable them to dispose of their local Spanish-Filipino coins at substantially the same rate as Mexican dollars were worth. The Government agreed likewise to continue the receipt of Spanish-Filipino coins in payment of Government obligations until September 30, 1904; after that it was to receive them only at their bullion value.

On the 14th of January, 1904, a second act was passed for the purpose of maintaining the parity of the Philippines currency by prohibiting the importation into the Philippine Islands of Mexican currency, Spanish-Filipino currency, and any other metallic currency which is not upon a gold basis. The penalty for violation of the law was forfeiture of the entire importation, one-third of the bullion value of the sum so forfeited to be payable to the person upon whose information the seizure of the money was made, the other two-thirds to accrue to the gold-standard fund. Money actually on shipboard at the time of the passage of the act was exempted, and passengers were permitted to bring in small sums—first-class passengers to an amount not exceeding in value 50 Philippine pesos; second-class passengers, a value of 20, and each third-class passenger a sum not exceeding 10. In addition to the forfeiture, a fine of not more than 10,000 pesos or imprisonment not exceeding one year or both, might likewise be imposed.

Inasmuch as before the passage of this act it had proved impossible to contract the currency by withdrawing from circulation the new Philippine coins paid into the Treasury in exchange for bills of exchange on New York, since any relative scarcity would be made up by the importation of Mexican dollars, it had become necessary to take some such action as that provided for in this bill. It was realized, of course, by the Government, that there might be more or less illicit importation on account of the wide extent of the coasts; but, in spite

of that fact, it was felt that importations could not be made in very large sums, and moreover, that, as soon as the new currency was once firmly established, there would be no further temptation to evade the law. It would not be possible, therefore, within the comparatively short period when smuggling would be profitable, to import contrary to law sufficient quantities to affect materially the establishment of the new system.

It was thought, however, that this act alone might not prove sufficient. So long as the old local currency, Mexican dollars, Spanish-Filipino pesos, and the old minor coins were in circulation at a less value than the new Philippine pesos, the effort would be made by exporters, employers of labor, and others buying provisions from local dealers to keep these old coins in circulation. It seemed desirable, if possible, to devise some means by which the new Philippine coins would be made cheaper for use by the common people than the old local coins, while at the same time they would possess the added advantages of a fixed value in terms of gold or of United States currency, of well-established ratios of value among themselves, and of the other advantages which went with them, such as certificates, etc.

The suggestion was made emphatically by many of the business men in Manila, particularly it seemed by those who would have the opportunity of becoming large holders of the old local coins, that the Government redeem them at a value somewhat higher than their regular market value, the most common suggestion being that it redeem them at par with the new Philippine coins. The Government felt, however, that it was under no obligation whatever to redeem the Mexican coins which had been received by their present holders at their bullion value, and that, if it redeemed the Spanish-Filipino coins at their regular circulation value—that is to say, a value equal to the Mexicans and about 10 per cent above their bullion value—it would be doing full justice to the holders. Any price above that would stimulate speculation, would place an additional and probably unnecessary burden upon the taxpayers, would tend to demoralize markets by a sudden change in prices, and would probably enable a comparatively few of the more shrewd or more powerful to profit at the expense of the mass of the people.

It therefore decided that the most nearly just plan on the whole, as well as the one which could be carried out with the least disturbance to business, was to impose a tax upon the use of the old local currency, the tax, however, not to take effect for several months, in order that the holders might have a fair opportunity of disposing of coins in their possession at reasonable rates. The act levying such a tax, together with other provisions, was passed and went into effect January 27, 1904. The tax itself, however, was not to be imposed until October 1,

the rate gradually increasing month by month from 1 per cent October 1 until it reached a 5 per cent rate December 31, 1901. Due exceptions were of course made so as to avoid injustice to those who had made previous contracts in terms of the local currency; also suitable provisions with reference to moneys collected for purposes of export, etc.

It was further provided that an announcement published in all of the principal languages and dialects of the islands be prepared and circulated, which should explain the new currency and the more important laws and regulations pertaining to its use, as well as the methods provided for the withdrawal of the local currency from circulation. These proclamations were to be sent to the provincial governors, provincial and municipal treasurers, presidents, and municipal councilors throughout the islands, and were to be posted and advertised as widely as possible everywhere. These two acts, so important in their nature and so effective in their ultimate results, are printed in full in Appendix B, 3, 4.

Before the American commissioner left the islands, he was requested by the governor to make further recommendations regarding any other action which might prove desirable, in order that the system be carried fully into effect.

After consultation, therefore, with the chief of the division of the currency, with members of the commission, and others, it was further suggested:

1. That provision be made so that the insular treasurer in redeeming Spanish-Filipino coins should receive as of equal value with them such other copper coins as in ordinary use circulated in the islands at a parity with Spanish-Filipino copper coins. This copper money was of course to a very considerable extent the money of the common people. It was rarely found in the banks, and the exchange could readily be made only by the Government or by some persons acting as agents of the Government. Of course such coins as those of British North Borneo and of the Straits Settlements, some of which were in circulation in the islands, would be redeemed at something of a loss, but it was very desirable that the copper money be taken out of circulation and the new copper be introduced. For this reason it seemed best for the Government to stand a slight loss, if necessary, in order to get rid of these coins which could not be exported in most cases by private individuals without a loss.

It was thought that it would be wise, therefore, for the insular treasurer to place redemption agents in the principal market in Manila and in the other leading markets throughout the provinces to make these exchanges, the suggestion being that the attempt be made first in a small way in Manila and that the service then be extended elsewhere if it should prove advisable.

The exchange for the minor silver coins should be made at the established Government rates, but the people should be allowed to exchange their copper coins in sums certainly as small as 50 centavos. Where it would not be possible to make the rates for the copper coins exactly the same as those for the larger ones, because it was customary for four copper coins to pass as equal to 5 centavos, it seemed that the fractional benefit should be given to the people. The rates of exchange should be posted and agents who could speak the language should be employed to make the exchanges.

2. If the price of Mexican currency were to fall so low that it could be profitably purchased as bullion, it was recommended that the Government purchase it promptly. The same principle should also hold with reference to the small Chinese and other silver coins.

3. Under the gold-standard act it was provided that the Government charge for exchange sold on New York by the Government in Manila be three-fourths of 1 per cent for sight drafts, and $1\frac{1}{8}$ per cent for telegraphic transfers, the same rates to be charged for drafts sold in New York on the treasury in Manila. The power was, however, granted to the secretary of finance and justice to change these rates temporarily by special order.

Experience seemed to have shown that, owing to the nature of the business between the Philippine Islands and other countries, especially that with the United States, it would not infrequently happen that drafts on New York would be sold in Manila at the Government rates. The chief purchasers were the banks, who bought drafts in large sums and then sold smaller drafts at slightly higher rates to their customers. Of course the larger importers bought from the Government directly. No drafts, however, were sold by the Government agent in New York on the treasury in Manila, and as time went on it became evident that from the nature of the ordinary business and trade such bills would not be sold so long as the rates remained as fixed in the law. It was considered extremely important that, since comparatively large sums were drawn from the gold fund in New York by drafts sold against it in Manila, this fund should be replenished usually by drafts on Manila paid for in gold in New York. It was suggested, therefore, that from conditions as they appeared at that time, a change in the rate of drafts on Manila be made. The rate of one-half per cent for demand drafts and three-fourths per cent for telegraphic transfers seemed to the commissioner to be about right.

4. Inasmuch as it probably would be best ultimately to rely mostly upon selling exchange for the maintenance of the parity of the new coins and for the regulation of the quantity of the currency of various kinds in the islands, it would probably be wise if some of the gold

in the treasury in Manila were sold or transferred to the United States, where it would draw interest.

5. It was thought also that later, although not immediately, it would probably be found wise to stop the practice of redeeming the Philippines currency in United States currency as provided in paragraph 3 of section 5 of the gold-standard act.

6. It was also advised, in conjunction with Mr. Kemmerer, the chief of the division of the currency, that the Government deposits in the banks be determined upon and maintained solely in the interests of the gold-standard fund and the convenience of the Government in putting money into circulation without attempting in any way to relieve monetary stringency or other commercial trouble by increasing or withdrawing deposits from the banks. It seemed the best policy to interfere as little as possible with the normal movements of business and so to arrange the Government control, whenever any control is necessary, as to permit the monetary system to work as nearly as possible automatically. If the Government were to state fully and completely its method in the law and then would not change its policy, it was felt that the new system would work substantially as would a regular gold-standard system.

7. The system of bank-note issue in the Philippines is not complete at the present time, only one bank issuing notes, and that under the Spanish charter. There seems to be some legal question as to whether the Spanish bank has not, under the law, a monopoly, so that no more complete system can be organized without its consent. It seemed, however, desirable that at the proper time the matter be taken up, and that, if possible, some arrangement be made by which a more satisfactory bank-note system could be established.

Soon after the passage of the act taxing the local coins, and after the proclamations had been issued explaining the new monetary system, the treasury department established in the principal market in Manila a stall for the exchange of the old copper coins for the new. It had been found that there was a very small demand for the new copper coins. The experience of the first few days, when an effort was made to persuade the market women and the customers to exchange the old money for the new, showed that at the regular rates established for silver it was unprofitable for the people to make the exchange and that comparatively few cared to get the new coins. This was the experience from that time until the tax went into effect, so far as the removal of the old copper coins is concerned.

On the other hand, there has been little hesitation about accepting the new copper coins. There has been a great scarcity for some years of small change in both Manila and the provinces, and the new coins were heartily welcomed. In a good many cases, owing in part to con-

fusion on the part of the people, the new coins became a source of speculation in the provinces. As has been stated before, 4 of the old coins passed for 5 cents Mexican. The new copper coins, of course, could be obtained 100 for a peso. If they could be passed off as the old coins were, 80 for a peso, there was a large margin of profit. It was found that in many cases people with considerable means, and even, in some instances, Government officials in the provinces, were making an effort to secure control of rather large quantities of these new copper coins, either by asking that their entire salary for the month be paid in the coins or by bringing silver to the provincial or municipal treasurer and exchanging it for these coins. These, then, were bought 100 for the peso, and were paid out in many cases at the rate of 80 to a peso. Comparatively soon, however, it became generally known that the Government stood ready to furnish the copper centavos in any quantity at the rate of 100 to the new Philippine peso, and this speculation has apparently largely stopped.

Under date of November 3, 1904, the secretary of finance and justice issued the following order regarding the rates at which bills of exchange should be sold in New York against the gold fund in Manila. The order came as a cablegram, in the following form:

Advise depositors in the United States of gold-standard fund to sell demand drafts on the Philippine treasury at three-eighths of 1 per cent and telegraphic transfers at three-fourths of 1 per cent in sums not less than $5,000. Rate temporarily fixed by Secretary of Finance and Justice in accordance with subsection 1 of section 7, Act 938.

This action of the Philippine government seems to be such that the gold-standard fund, under these rates, will probably become automatically self-sustaining. In case it should be found that the demands continue practically permanently too strong on either side, of course the rate can be readjusted by a new executive order. It, however, is extremely desirable that as soon as possible the rate be found which will best sustain the gold-standard fund and likewise best meet the needs of business. Then no further change should be made, in order that business men may count absolutely upon the rate remaining unchanged. In all probability that rate has already been found.

It will be noted from what has been said above that the Philippine currency question may be considered substantially as settled. In the last report of the chief of the Bureau of Insular Affairs in the War Department in this connection the following statement is made:[a]

The Philippine currency act was passed by Congress April 3, 1903. The first new Philippine peso was placed in circulation July 23, 1903.

Since that time the Government has eliminated 30 or 40 millions of debased

[a] The report on this subject is printed in full in Appendix B, 2.

currency and has substituted for it a currency based upon the gold standard without serious jar or dislocation—all accomplished within seventeen months. In the minds of financiers and bankers this accomplishment is considered a wonderful achievement, unique in the history of the world.

This is certainly a remarkable showing, and one that may properly afford to the Philippine government and to those interested in its success great satisfaction.

CHINA.

The general plan of work followed by the American commissioner in China has already been outlined in the general report of the commission, beginning with page 14. The pamphlet which was prepared for distribution in China to form the basis of discussions with Chinese officials is printed in full as Appendix A 1. The pamphlet apparently awakened considerable interest. The Government had already committed itself to a revision of its monetary system, and there had been many publications from various bankers and business men in China advising the Government regarding the best methods of carrying out the reform. Moreover, inasmuch as the Chinese Government had invited the assistance of the Government of the United States, the pamphlet assumed somewhat more of an official character than had been the case with those which preceded it, and the highest officials, knowing that they would probably ultimately be called upon to express to the Government some opinion regarding the merits of the plan, felt compelled to look somewhat carefully into the subject, and the pamphlet was eagerly read. Some of the Chinese papers printed it in full in installments.

The general nature of the work of the commissioner having already been outlined, it remains here only to enter somewhat more into detail in an explanation of the present monetary and business conditions in China, as well as of the attitude of the different classes in the community—government officials, business men, etc.—toward this reform, with a more detailed statement of the reception of the proposals made.

1. MONETARY AND BUSINESS CONDITIONS.

TRADE WITH FOREIGNERS.

The conditions under which trade with foreigners is carried on in China are so different from those which obtain in the internal trade that it is best to consider those conditions under separate heads. The import and export business is practically all in the hands of a comparatively few foreign firms. These firms, through their native Chinese compradores or managers, make their purchases from the

native shippers and producers in the interior, and in the same way through these native dealers sell to the Chinese consumers the goods which they import. The foreigners themselves in many cases have practically nothing to do with the actual transaction of business with the natives themselves. They look after the selling of the goods which they are exporting to foreign countries. They see to the purchase in foreign countries of the goods which they are importing. They do the banking business both ways with the foreign countries; their real dealings in China itself are practically intrusted entirely to their native manager, the compradore.

In their dealings with foreign countries they generally use as a monetary basis the pound sterling. Of course, if they are dealing with the United States or Japan or France, they may use the dollar or the yen or the franc. Even then, however, in many cases the exchanges are made on the sterling basis and the matter of settlement is simply another step beyond the exchange from the native monetary unit into pounds sterling or visa versa.

In their dealings with the natives, through their compradores, they must, of necessity, use the native unit, which is, generally speaking, the tael. The tael, however, as is well known, is no invariable unit in general use throughout China. The largest business houses are at Shanghai. There, of course, the so-called Shanghai tael is the unit. If the person is doing business in Canton, he will find the Canton tael as its unit. In Tientsin, that city has its separate tael. In Peking, two are in common use—the Kungfa tael for ordinary commercial dealings; the K'up'ing tael for dealings with the Government, payment of taxes, etc.

Moreover, the importer or exporter in paying his dues to the Imperial Customs Service makes use of the Haikwan tael, which is somewhat heavier still than any of the others mentioned.

The foreign business man in Shanghai, for example, becomes thus familiar with the Shanghai tael and more or less with the Haikwan tael. He learns to know thoroughly well the ratios which these bear, each to the other (100 Haikwan taels=11.4 Shanghai taels). He is fully familiar with the tael fluctuations in the value of the Shanghai tael as compared with the pound sterling, inasmuch as the tael is a mere weight of silver and in consequence its value fluctuates from day to day with the market price of silver bullion. His compradore, however, or his other agents who have dealings with the natives in the interior have a much more bewildering variety of moneys to deal with. In practically every different city of consequence, as they go into the interior selling their goods or making purchases, a new tael will be found, having a new ratio of exchange with the Shanghai tael, and in every case the reckoning must be made from one money into the other. Mr. Morse, in an article in the Journal of the China Branch of the

Royal Asiatic, enumerates 78 different taels, with their relative weights and values. (See Appendix A, IV, 2.

In Shanghai itself, for ordinary business dealings among foreigners as well as among the natives in their local transactions there, the Mexican dollar is the common unit of payment. The merchant must, therefore, be familiar, not merely with the ratio of the pound sterling and the tael, but also with the ratio of the tael and the Mexican dollar. His goods have been paid for in pounds sterling. They will be sold for Mexican dollars. The Mexican dollar being itself a coin with no legal tender qualities has its value dependent mainly upon its value as bullion. Inasmuch, however, as in some parts of China the Mexican dollar is the generally accepted monetary unit, and, as such, the most convenient money there for trade purposes, it has a special use of its own, and its value varies often by several hundredths from the bullion value which forms the chief basis for its exchange value.

If the merchant is one of importance, whose business extends pretty generally into the different parts of China, his business methods become still far more complicated than is implied in the foregoing. In Shanghai the chief monetary unit in retail trade is, as has been said, the Mexican dollar. If one goès up the Yangtze River for a day or so, he will find places where the unit of most general acceptability in the towns is the Carolus dollar, an old Spanish dollar which was introduced into the country many years ago and which has retained its reputation in certain localities to a surprising extent, inasmuch as its value is generally maintained at a rate considerably above its bullion value. In certain localities the reputation of the Carolus dollar has been so astonishingly satisfactory that, at the present time, even well-made counterfeits, which are known to be counterfeits, have a regular fixed value and circulate readily. For example, one witness states that in a town where he lived a Carolus dollar of the standard type passed for 100 units. One counterfeit of the same dollar, which was well known and comparatively easily recognized, passed for something like 92 per cent of the original, while a second counterfeit, also well known and easily recognized, passed for only some 83 per cent of the original.

On ascending the river as far as Hankow the province of Hupeh is reached, which has a separate coinage of its own, and the Hupeh dollars are practically the only ones seen in common circulation and the only ones which are readily accepted. The Hupeh mint has possibly the best reputation of any of the independent mints of China; the coins are well made and their reputation seems rapidly extending. The Peking-Hankow railroad on its southern end has been making use of these Hupeh dollars. The contractors building the line, in order to save themselves the trouble of carrying tons of "cash," have

used the dollars, or dollar notes, in paying off their laborers; the railroad itself will take in payment for railway fares nothing but these dollars or the Hupeh provincial notes issued in terms of these dollars, so that, on the whole, their range of validity in use is rapidly extending, and has now even gone considerably beyond the bounds of the province itself. I have already indicated the fact that the Hupeh government has issued government notes based on these dollars, and these notes on account of their greater convenience are becoming popular. There has been no hesitation whatever as yet on the part of the government in redeeming them on demand, and they pass at par without the slightest difficulty.

If, instead of going toward Hankow, one were to go from Shanghai to Canton, a separate dollar—the Canton dollar—would be found. If the traveler were to go north to Tientsin he would find in common use the Peiyang dollar coin in Tientsin, or, perhaps equally common, the British dollar coined at Hongkong. In Peking the British dollar is preferred to the Peiyang dollar, even though the latter is coined in the same province and the former is a foreign coin. The natives have discovered that the British dollar is likely to be of a rather better quality of silver, and in consequence it is preferred for purposes of melting. It is not unusual, when making a small purchase and haggling over the price, to have the local dealer finally accept an offer on condition that he be paid in the "man" dollar instead of the Peiyang, the British dollar being generally called among the natives the "man" dollar on account of its having the device on the dollar of a figure of a human being. Sometimes even, in these localities, one finds the Kirin dollar from Manchuria, although on account of the poor quality of the silver which it sometimes contains it is not generally acceptable.

Besides the dollars already mentioned, which are found in the larger places and which are not exactly interchangeable one for the other in large quantities in any place, some being always rather more in demand than others and in consequence at a slight premium, there are other dollars found in Nanking, Fuchow, and elsewhere.

It should be kept in mind also that, although practically all of these native dollars are supposed to represent seventy-two one-hundredths of the K'up'ing tael, while the British dollar is very nearly the same in weight—416 grains—no one of the mints has a reputation absolutely above suspicion. As has been intimated, the Kirin dollar from Manchuria is generally unacceptable in other provinces further south, but the Peiyang dollar and the Canton dollar are also, it is generally known, at times light in weight or deficient in quality, and even the Hupeh dollar, which is probably best in reputation of them all, is not entirely above suspicion and is occasionaly discounted.

The difficulties of the dealings of the foreign merchant would, however, only be well begun with what has been said above if he were to

attempt to extend his trade himself into the interior away from the treaty ports and the best known lines of travel where the best known dollars and taels are in common use. The difficulties of the internal trade along similar lines will be spoken of somewhat later. It is better, while we are dealing with the import and export trade, to confine ourselves somewhat more closely to the special difficulties along that line of business.

Although the great variety of moneys in use makes business difficult, the greatest risk and difficulty in connection with the monetary system comes from the fact that all of these moneys in China are on a silver basis, while the importer or exporter in most cases must settle his home trades on a gold basis. He may make a purchase in London, for example, when the pound sterling would be worth, say, 8 Shanghai taels, and may even have arranged to sell his goods on that basis to be paid for on delivery. By the time the goods reach Shanghai, however, a fall in the price of silver may well have made 8 taels worth no more in terms of gold than 6½ or 7 would have been at the time the purchase was made, and his prospective profits may thus have been turned into a loss.

This continual fluctuation in the value of the tael as compared with the pound sterling has made the import and export trade partake so much of the nature of gambling that, although some fortunes have been made, others have been lost through no fault of the merchants concerned or with nothing to their credit. Such a state of affairs practically forces the most conservative business man into paying undue attention to the conditions of the money market at the expense of the care which he should give to his mercantile business proper. Fortunes are so easily made or lost through the fluctuations in exchange that many merchants have not the stability of character to enable them to give a sufficient amount of care to studying the wants of the native Chinese customers and attempting to supply these wants through legitimate trade measures. Of course, many of the risks on specific purchases are avoided by arranging with the banks for forward rates of exchange. This, however, is always expensive and unsatisfactory and does not remove, though it shifts somewhat, the speculative element. There can never be a sound importing or exporting business carried on until China is given a monetary system, the unit of which shall be substantially stable in comparison with those of the gold-standard countries.

THE LIKIN.

Aside, however, from this question of the monetary difficulties, others, which are only indirectly connected with the monetary system, hamper the import and export trade. The most important of these other hindrances is found in the likin duties, which are levied in

many places in China. These duties are practically internal transit duties, which are collected on goods in transit, passing various likin stations, established ordinarily by the provincial authorities. A smaller tax is the octroi, levied by various cities at the city gates, especially, of course, on country produce brought into the city for sale. Under various treaties with foreign powers attempts have been made to abolish these likin duties and to substitute in their stead a certain fixed charge, which shall be added to the customs duties when goods are imported. In many cases this result has been attained, and the importer whose goods are destined for consumption in the interior may pay his additional customs duty, usually $2\frac{1}{2}$ per cent in addition to the 5 per cent customs. The new treaties with Great Britain, the United States, and Japan permit a surtax of one and one-half the customs (i. e., $12\frac{1}{2}$ per cent in all) on imports and of one-half the export duty with a maximum total of $7\frac{1}{2}$ per cent. When these taxes are paid, the dealer may receive a pass which entitles his goods to transit into the interior or to the coast without further payment to the likin officials.

The trade is, nevertheless, in many cases seriously hampered. The likin officials must be visited, the pass presented, and its validity passed upon. In many cases the officials, in order to make some personal profit, so delay the transit of the goods in the examination and the demanding of passes that the small bribe desired is frequently paid in order to save time. Moreover, the dispute as to exactly what is intended by the payment of these transit duties is not yet entirely settled. The foreigners, who are naturally anxious to have their trade burdened as little as possible, insist that the goods are to be free from duties until they are practically in the hands of the consumer. The native official, on the other hand, claims that as soon as they are stopped in their regular transit and are delivered to the consignee at the interior port, the validity of the transit pass ends, and the goods may then be subjected to further local taxation before they are finally placed in the hands of the consumer.

Much has been done, especially under the late treaties, to remove this burden of the likin, but it is not felt that the desired end has yet been reached. The Chinese Government, however, apparently has seen the desirability of meeting fairly these demands of the foreigners. Committees have already been at work to see if it were possible to provide satisfactory substitutes in the form of taxes of another kind to take the place of the revenue which will be lost to the provincial officials from the actual abolition of the likin duties unless the central Government makes compensation, and it is to be hoped that in the not distant future this evil will be removed.

One chief trouble, which has come through the payment of these likin duties when transit is not provided for as above, is that they

are naturally made payable in each separate province, or even minor political subdivision, in the local money. If, therefore, the shipper offers to pay in dollars the demand will probably be made in taels. If he is familiar with the Shanghai tael it may well be that the demand will be made in terms of a local tael, and whenever the opportunity offers for changing from one system of taels to another the advantage is, of course, always taken by the local official or local money changer who is acting with the official in making the exchange.

These customs of taking advantage of the exchange are, of course, found not merely among the officials in their governmental dealings, but are generally found elsewhere as well. The foreign banks, for example, when changing pounds sterling into dollars for European customers, reckon first the rates of exchange into taels with, of course, the usual exchange profit, and then the taels into dollars with a second profit. A similar mode of procedure is, of course, adopted by every person who has it in his power to perform the service of exchanging money, and the exchange business, while profitable in itself, has thus become an extremely troublesome hindrance to mercantile business, both in the export and import trade and in the more strictly internal trade.

BANKS AND BANKING.

The banking business in China is of great antiquity, the general principles having apparently been fairly well understood and the business practiced in China long before any such business was established in Europe.

So far as the foreigners who are engaged in foreign trade are concerned, their business is done mostly through foreign banks, of which there is a sufficient number with suitable branches and agencies to supply reasonably well the foreign demand. The principal foreign banks are the Hongkong and Shanghai Banking Corporation, the Chartered Bank of India, Australia, and China, the Yokohama Specie Bank, the Russo-Chinese Bank, the German-Asiatic Bank, and the Bank of Indo-China. These banks do a considerable deposit and discount business, but the chief interest, after all, is in their exchange business. There is a tendency, of course, as local business develops and foreign business houses are established for the local trade, for the discount and deposit business to increase, but as yet the exchange business is of first importance. These banks are also active in financing local investments made by foreigners, some of them in arranging for loans to the Chinese Government, and in general in doing financial business of all kinds for foreigners in their business in China, whether dealing with one another or with the native Chinese.

These banks do their business in China without any contract with the Chinese Government, and with no charter issued by that Govern-

ment. They are there simply on tolerance, with the protection that comes from the influence of their respective governments and with the privileges granted to foreign property holders and foreign business men in the international settlements, including, of course, so far as the right is extended to ordinary business men, that of extraterritoriality.

It is to be noted also that several of these banks issue bank notes under the authority of their charters from home, but without any charter or other grant of the privilege from the Chinese Government, either central or provincial. The bank notes form a convenient medium of circulation in some of the treaty ports and within narrow limits outside of those ports. They are issued ordinarily in terms of dollars, although there are also tael bank notes. The dollar notes are regularly payable, of course, in the dollar common in the city where they are issued; for example, in the Mexican dollar in Shanghai, in the British dollar in Canton or Peking, where that dollar is the one usual in circulation, etc. The same principle would hold with reference to the tael—those issued by the banks in Shanghai, for example, being payable in the Shanghai tael. It is worthy of remark (and frequently is the occasion of severe remarks) that the notes issued by a foreign bank in one city in the Chinese Empire are not necessarily acceptable at par by other branches of the same bank situated in different cities. A Shanghai bank note, for example, is very generally discounted if presented to the Tientsin or Peking or Hongkong branch of the same bank, the discount sometimes being as high as 5 per cent. A Tientsin note is sometimes discounted in Peking as much as 1 per cent, although the two cities are only some three hours apart by railroad, and the Peking branch issues no notes of its own.

The discount of bank notes by different branches of the same bank situated in different cities is so great that it makes a very appreciable source of loss to travelers who are not especially careful with reference to the kind of money which they are carrying, and this discount places of course a decided check upon many kinds of local traffic, although it forms a decided source of profit to the banks themselves. When the Chinese Government establishes an imperial bank in connection with the establishment of its new monetary system, one of the most important of its reforms would of course be to make its notes acceptable at any of its branches or agencies anywhere within the Empire.

Inasmuch as the number of banks is quite limited, and since in some of the rather important ports not all of them have branches, it enables them in many cases to work harmoniously enough each with the other so as to enable them to secure pretty large profits from their exchange charges. The most important of the banks have made very large profits since their establishment. Some of the newcomers

doubtless have not been able to secure so high profits. The banks are, generally speaking, known for their accuracy and carefulness in carrying out their contracts and in meeting their obligations. But they occupy a position of such advantage in many ways that it seems likely that their high profits are obtained in part at the expense of the development of trade in other directions in spite of the fact that, one may add with even more emphatic truthfulness, without the facilities which they have offered, it would have been utterly impossible for trade to have developed anywhere nearly so well as has been the case.

NATIVE BANKS.[a]

Native banks are found everywhere in China, and are perhaps to be designated as exchange banks, loan banks, and cash shops, although the distinction is in part simply the different types of business done.

As in the case of foreign banks, so also regarding the native banks, the Chinese Government has no general law prescribing conditions for their incorporation or method of organization. If a group of men wish to organize a bank, they do so, choosing their place, the amount of capital, their method of doing business, etc.

Their detailed methods of doing business are not well known among foreigners, but there can be no doubt regarding their efficiency. In most of the large cities there exist bankers' guilds, to which belong the local loan banks, as well as those engaged in the business of transferring money from one part of the country to another, and these guilds have brought the banking business to a high degree of efficiency.

The most famous bankers' organization, especially that which has to do with the transferring of money and credit particularly in the north of China, is the Shan-si Bankers' Guild. It is well known that in China it is the custom not merely among bankers, but in general among artisans and business men of all kinds, for children to follow the occupations of the parents. In consequence, the leading bankers may be said to have inherited their capacity for the banking business, and, of course, they have been thoroughly trained in that business. As the Shan-si bankers have been so successful for many generations, they enjoy great prestige. It is commonly believed that if they will themselves take up heartily the question of monetary reform on any good plan, their influence alone will go very far toward making it a success. If they oppose any system, it will be extremely difficult to make it successful. The following quotation

[a] This account of native banks is to a considerable extent taken from "Chinese Business Methods and Policy," by T. R. Jernigan, former American consul-general at Shanghai. Some of the information has been taken from other books, some derived from personal conversation with Chinese bankers.

from Jernigan's book[a] gives a brief account of the method of organization and management: "The bankers themselves, being Shan-si men, always aim to employ only natives of the province of Shan-si, and, when possible, select men of their own village. When a man is appointed to a post at one of the branch offices, his family is taken in charge by the bank and held as security for his fidelity and good behavior. But it is understood that the family is not actually held in prison, though kept under the strictest surveillance.

While at his post the employee is not permitted to write to any member of his family under seal, but all such letters must be open and sent through his employer. No salary is paid, but all necessary expenses incurred on his behalf are actually kept and discharged by the bank. The term of the appointment is for three years, and after the expiration of that time the employee goes to his employer's house, taking with him an account of the money expended during the term, when he is closely searched, even to his clothing. After a full examination has been made, and the accounts found satisfactory, and the affairs of the bank have been prosperous during the three years, the reward is made remunerative, and the employee joins his family, who then no longer remain under surveillance. But in the event that the investigation, both of the accounts and the condition of the bank, prove unsatisfactory, the effects of the employee are seized and his family continue, as it were, in bondage, until a suitable fine is paid, or the employee may be imprisoned.

It is the means thus employed by the Shan-si bankers to secure their banks against losses by defalcations or otherwise that have intrenched them in public confidence, and they are often used by the central Government as the medium for the transmission of revenue from the provinces; and their customers may be found among officials of the highest rank.

As an additional protection, the head managers of the banks associate together in a guild, and, when the occasion demands, they formulate a line of policy to meet the particular emergency. The rules to govern in the general banking business relate to the subjects which enter into the daily operations, such as the rate of exchange, as regulated by the tables posted on the boards of the bank guilds, and the bank violating any of the rules is fined a certain sum. There is also a rule that the books of a bank shall be carefully examined, and that the discovery of any underhand dealing, or any attempt to conceal a transaction, is punished with suspension.

Each bank issues its own bills, which are made payable to bearer, and customarily on demand, but sometimes are payable so many days after being issued. When a bill is presented, the holder has not the

[a] Page 93 et seq.

option to say what shall be given him as the equivalent, though his preference is generally respected; the bank can pay the bill in either cash, the current bills of another bank, or in silver or gold, according to the current of exchange."

As is customary in other matters concerning the welfare of the common people, banks are also likely to feel the displeasure of the people if they fail to meet their obligations. In some localities the holder of a bill, on which payment is refused by the bank, is permitted to take anything about the bank which he sees which is substantially equal in value to the bill itself, and if he does so, the act is not considered theft and he is not liable to punishment. Doubtless this privilege is at times abused, and the unpopular bank is practically plundered by hostile bill holders and the rabble.

Sometimes, too, when a bank is in a precarious condition, but still knows that it would be able to meet its obligations if a run were prevented, the services of a local official are requested in order to prevent a run upon the bank, and the bank itself is permitted to state that it will pay later all its obligations. It is comparatively rare, however, that banks of any particular importance fail. The genius of the Chinese for organization and mutual responsibility is such that the bankers' guilds, knowing substantially accurately the condition of each member, assist the weaker ones to tide over a period of depression and thus prevent the evils which come from bank failures. The Chinese have also clearing houses, which enable them still better to keep track of the credit of each individual bank and to prevent employment of irregular methods.

Though the Government does not require that those about to engage in the banking business obtain permission, and although no general law exists, the Government is nevertheless often very severe in case banks fail. In such events the Government may make the most careful investigations, and if the managers are at fault they are likely to meet with very severe punishment. Decapitation of the principal offenders is by no means unknown, provided it is found that the failure has occurred through their dishonesty, or even through their negligence. Their relatives also will later be held responsible for the debts of the bank, their property, if necessary, being confiscated, and they themselves perhaps being heavily punished besides.

It will be seen that with these somewhat rigid methods of native banking, and particularly with their widely extended guilds, which reach practically every section of the country, it is entirely possible for the foreigners who wish to make purchases in the interior through the connections which the foreign banks have with the native banks to make payments anywhere in China and to transfer money without risk of loss and at rates that may be, on the whole,

under the circumstances, considered reasonable. The charges for transfers run often as high as 7 or 8 per cent for thirty days, and if money is borrowed for a considerable period of time rates of 11 per cent, or even higher, per annum are charged.

Besides the banking business mentioned above, which refers, of course, primarily to the exchange and loan business, should be mentioned that of the cash shops which are found everywhere in China, in many cases several in comparatively small cities. Inasmuch as in the interior, and for that matter in the native trade in the open ports, the business is done entirely with copper cash and with chunks of silver (sycee), it is desirable that each person have the opportunity to secure readily copper cash in practically any quantity needed for local business. It is the business of the cash shops to exchange cash for silver, and vice versa. In very many cases also these cash shops issue their cash notes after the manner already indicated in connection with the more important loan banks. These notes are often for very small sums, representing often not more than $0.50 or $0.25 gold, and sometimes as low as $0.05.

BUSINESS IN THE INTERIOR.

The Chinese have usually been considered by foreigners not merely unprogressive but also unenterprising. It is often thought that they are largely hand laborers, probably because we see so many engaged in hand labor in this country. The Chinese are doubtless dominated by custom to a somewhat greater extent than we are in this country. Invention has not been stimulated there, and there is less mechanical progress by far than here. In their own way, however, the Chinese are by no means unenterprising, and probably a larger proportion of the Chinese have a shrewd instinct for trade and trading than the citizens of any other country. The Chinese is a born speculator whatever his nominal occupation may be. Whenever he engages in labor he usually prefers, if it is possible, to work by the job, in order that he may make something extra by unusual diligence or may so arrange his work as to manage his time to suit himself, in many cases engaging assistants to help him in his work.

All through the interior of China there are great highways which for centuries have been important trade routes. Over these roads in many cases go huge caravans of camels, or mules and donkeys, or carts, carrying goods from one section to another, or from the interior to the frontier, where they will be transported to foreign countries. Over the minor traffic routes there are continually going men with wheelbarrows, carrying from two to six hundred pounds of local freight for distances of from ten to one or two hundred miles, in order to secure the profit that comes from bringing goods into a

locality where they are more in demand than at the place of their origin. There are many local factories producing, for example, earthenware, or incense, or a peculiar kind of material for clothing or ornament, or other native product which is in demand for from fifty to two or three hundred miles from the place of manufacture. Such local goods are very frequently transported by pack mules, wheelbarrows, or on the shoulders of men, who, with a pole some 6 feet in length over their shoulder, with a bundle on each end, will carry for distances of, say, 100 miles from 50 to 150 pounds. In very many instances, probably almost universally, these individual traders are not hired men carrying goods for wages, but are, rather, individual speculators, who buy their goods from the factory and carry them to a place of sale, making their wages from the profits. For example, in the Province of Honan, between Changtê and Taok'ou, many wheelbarrow men were met who were carrying on their barrows earthen jars from the south to the north a distance of some hundred miles, and bringing the powdered wood of the hills back again. Nearly all of the work of distributing the bluish-white coarse pottery of T'suchou is done by these wheelbarrows. Two men, or a man with a donkey, will carry on a wheelbarrow a load of from four to six hundred pounds, with a capital investment of from $5 to $6. The trip takes them from four to five days, they making some 20 miles a day. They hope for a profit of some 6 or 7 cents a day over and above food and fodder for themselves and beast.

Two men, one pushing, the other pulling a heavy wheelbarrow load, said that they were wheeling 400 catties (533 pounds) of incense. This, when mixed with the powdered bark of a tree and rolled into sticks, makes the joss sticks so often seen burning in temples and before shrines. These men went about 20 miles a day, and were going altogether a distance of 100 miles. They thought they would make enough profit to pay their expenses fairly well.

Others were hauling millstones on low "jumpers" with a cow or donkey to haul it. In this case they seem to make somewhat more profit. A stone costing 1,000 cash at the quarries brings 5,000 cash at its destination. The traveling expenses for five days for man and beast would amount to not more than 3,000 cash, thus leaving a profit on the two stones of, say, 8,000 cash—say, $4 or $5.

In North China some interviews with pole men—that is, men carrying loads on each end of a pole balanced across their shoulders—gave somewhat similar results. One man, for example, making a round trip from Mongolia to T'ung-chou, near Peking, every fifteen days, would carry 700 cheap fans. He would buy them at the rate of 5 cash for two fans and sell them for 10 cash each, making thus a profit of 7½ cash per fan. He would thus be making wages, if he sold promptly his stock and kept busily at work, of some $0.18 a day, out of which he

would board and lodge himself. Another man with cheap straw hats, of which he could carry 200, buying at 25 cash each and selling at 40, would make a profit of 15 cash, or 3,000 cash—say, $1.50 to $2—for his fifteen days' work, this being less profitable than the other. Even these, however, do a munificent business as compared with the dung gatherers, who are able to pick up on the roads from one to two baskets of dung a day, which they sell from 10 to 20 cash each, giving them an income of from half a cent to 2 or 3 cents a day. It should be kept in mind, however, that these dung gatherers are mostly elderly men who are too feeble to work at hard labor, or children who have not yet begun the serious work of life, so that it is not to be expected that their income would be in proportion to that of regular workers. That the work is carried on at all, however, is a most striking instance of the thrift of the Chinese and of their willingness to use their time in some industrious way, even though the returns are very small.

A better estimate as to wages may be made from the statement of one of the largest railway contractors, a Chinese, on the Peking-Hankow Railroad. His company had some five or six thousand men at work doing grading and such other unskilled labor. When hiring men by the day in the winter, when there was little demand, he paid 140 real cash, say, in the neighborhood of $0.09; in the summer time, when the demand for laborers on the farms was much greater, he paid possibly double that. Instead of hiring men by the day, he often contracted with them to remove earth by the cubic feet, his rate being in winter 160 cash per 100 Chinese cubic feet—in round numbers, 110 cubic feet. In the summer time for the same amount he would have to pay 300 cash ($0.15 to $0.20) at least.

These men, small as is their income, are nevertheless not unintelligent, and the smallness of their earnings makes it imperative that they do their work as thriftily as possible. In most cases, buying as they do in one locality and selling their goods in another locality somewhat remote, they are almost certain to be trading in two or more kinds of money. Often the cash which are employed in one locality are of a different quality from those in the other locality where their goods are sold, and it is quite possible that on their way from the place of purchase to that of sale they have had to pay their expenses in cash of still a different kind. Attention has already been called to the fact that the taels in the different ports vary, but the variations are no less frequent in the interior.

At Wei Hwei-Fu, in the province of Honan, it was desired to send a telegram. The agent was given 20.73 Kungfa taels, which he weighed and said were equal to 19.98 Wei Hwei taels. The price of the telegram was reckoned first in cash, amounting to 14.688 cash, at 1,030 cash to the tael according to his rate of exchange, or 14.26 Wei Hwei taels. In Hupeh dollars, in which he wished to be paid,

he figured the bill at $18.36. It will be noted from the above calculation that 1 Kungfa tael equals 0.9637 of a Wei Hwei tael.

At T'su-chou, near the border of the province of Chili, we learned that the local T'su-chou commercial tael was to the K'up'ing tael, the official tael of Peking, as 1,021 to 1,000. The K'up'ing tael is to the Chingping tael, also used locally in that department, as 1,000 is to 1,060, whereas the K'up'ing tael is to the Kungfa tael, the common tael in commercial use in Peking in the same province, as 1,000 to 1,042. It is interesting to note that in that locality, T'su-chou, 49½ real cash count as 100, while in T'ung-chou, near Peking, 48 real cash count for 100.

Almost invariably the number of cash which passes for 100 is somewhat less than 100, one or two at least—it being assumed, we suppose, that the person who strings them may deduct one or two cash for the furnishing of the string and the trouble of stringing them. What is still more puzzling, however, is the fact that a large proportion of the cash now in use are counterfeit (or perhaps one should rather say are made by private individuals), are often small in size and of very poor quality. In certain localities, where this is common, the cash shops, and in consequence the ordinary dealers and small traders of the kind mentioned above, have by custom agreed that there shall be say from 10 to 50 small poor cash in every thousand, or, instead of this, the number of good cash which shall count for a thousand may be reduced.

The most bewildering system of cash counting in the Empire probably is found in Peking. One of the emperors, Hien Fung, about the middle of the last century, thinking it desirable to have somewhat larger coins, made some 10-cash pieces; but finding the system very profitable, he did not make them 10 times as large as the former 1-cash piece, but only about twice as large. Then he made an over issue. The consequence is that the average cash piece found in Peking at the present time is marked as a 10-cash piece and counts, if few cash are used, as a 2-cash piece when compared with the real cash found elsewhere. In local counting, however, when one begins to count cash by the hundreds or by the tiao (thousand), there is a curious combination. Each piece counts as 1 cash until as many as 10 are used. Above 10 each piece counts for 20 in the local language, that is to say, 200 cash means actually 10 of these 10-cash pieces; therefore 1 tiao (a thousand cash) means only 50 pieces; but with the usual discount that is made by the string one finds actually only 48 pieces—that is to say, the 48 pieces equal in count, not necessarily in value, 960 pieces of the ordinary cash, the two being allowed for the string. In T'ung-chou, a few miles away, the string which counts for a thousand would be nominally 500 cash, as each one in that locality is supposed to be equal to two, but as a matter of fact, two being taken

out for the string, there are really 496 pieces to the thousand. About 10 per cent there, it is understood, may be poor cash.

These examples, of course, might be multiplied many-fold if one were to travel through China and note the specific customs found in the different places. When one takes into consideration, therefore, the fact that the Chinese are all traders, and that a very large proportion of the common people are buying and selling to probably a greater extent, so far as the proportion of their income is concerned, than the residents of almost any other country, it becomes a question whether in any other country in the world a common people can be found who would so readily understand the intricacies of monetary practice or who would so readily learn the peculiarities of a new system of money.

The fluctuations in the price of silver as compared with the price of copper make the rates of exchange mentioned above variable, so that although the ratio of the Shanghai tael, for example, to the K'up'ing tael, is substantially invariable, the value of either in terms of copper cash varies from day to day, as well as in terms of gold. The value of silver during the last twenty years has diminished more in terms of gold than has the value of copper cash. Sir Charles J. Dudgeon, chairman of a special committee to investigate the subject, reported that, as compared with gold, silver between 1882 and 1902 had depreciated 49.7 per cent, while copper cash had depreciated only 26.6 per cent. The same matter is stated in a somewhat different and more illuminating way by Mr. J. W. Jamieson, commercial attaché of the British legation, in the following table:

[*Datum.*—In 1882, 5s. 2d. = 1 Haikwan tael = 1,690 cash. In 1902, 2s. 7.2d. = 1 Haikwan tael = 1,240 cash.]

	Per cent
In terms of gold—	
Taels have depreciated	49.7
A fall from 62d. to 31.2d.	
Cash have depreciated	31.4
In 1882, 1,240 cash bought 3s. 9½d.	
In 1902, 1,240 cash bought 2s. 7⅕d.	
In terms of cash—	
Taels have depreciated	26.6
A fall from 1,690 cash to 1,240 cash.	
Gold has appreciated	45.9
In 1882, 2s. 7⅕d. bought 850 cash.	
In 1902, 2s. 7⅕d. bought 1,240 cash.	
In terms of silver—	
Cash have appreciated	36.4
In 1882, 1,690 cash=1 tael.	
In 1902, 1,240 cash=1 tael.	
Gold has appreciated	99
In 1882, 1 tael=5s. 2d.	
In 1902, 1 tael=2s. 7⅕d.	

The samples given above of the income derived by traders and workingmen of different classes serve to show also how very essential it is that in the introduction of any monetary system into China there be a unit coin which is very small in value, one comparable with the present 1-cash piece, which may, in round numbers perhaps, be spoken of as one-twentieth of an American cent.

In several of the provinces, in order to avoid in part the difficulties which arise from carrying such large quantities of coins so small in value, as well as to secure the profit which comes from coinage, the viceroys have been introducing new coins—10-cash pieces. These pieces are issued nominally at their face value, 10 of what are called the real cash. When they, however, are put into circulation at some distance from the place where they are minted, they often do not pass at their full value. For example, at Wei Hwei-Fu, in the province of Honan, the local magistrate reports that occasionally copper 10-cash pieces of the central government are seen there, which have been sent down from Peking by the Board of Revenue to be introduced into the circulation. So also some other 10-cash pieces have come from the province of Hupeh, where they are coined by the viceroy, and are in pretty general use; but so far from home they pass for only 6 cash.

Still another source of confusion which disturbs local trade in connection with the monetary system is the variation of the commercial rate of the tael in most places most decidedly from the Government's rate. In the interior the only money actually in circulation in ordinary local traffic is the cash. The Government officials, however, have had their salaries fixed in taels, and the taxes which they are compelled to remit to the central Government are also in taels. Their salaries, having been fixed many years ago, since silver has fallen in value, have very greatly declined. In consequence a salary which formerly might have been reasonable is at the present time entirely insufficient. The central Government has perhaps been able to bear its own troubles by increasing the number of taels demanded from the local official, but it is not possible for him nominally to increase his own salary. He has, however, in most cases been able to raise the rate at which taxes levied in taels must be paid in cash.

For example—to give one out of many instances—at one of the smaller places in the interior province of Honan the local magistrate said that the tael in circulation there exchanged in trade at the rate of 1,100 cash (in another town 30 miles away the rate was 1,130). The rate, however, at which he collected taxes was 2,600 cash to the tael (Several other magistrates had stated that they collected at the rate of 2,400 per tael, while one collected at 1,800 only. This kindly magistrate was soon removed, to the great sorrow of his constituents, who, on his departure, almost buried him under complimentary red umbrellas). Of the 2,600 cash collected from the people, 1,200

was sent to the capital for every tael of taxes which had to be remitted. The remaining 1,400 was kept, as the magistrate explained, for "local expenses." His interpreter, a friendly Chinese of foreign training, who saw no objection to the facts being known, explained in an aside that "local expenses" meant the magistrate's own pocket. This is the usual explanation of the use that is made of the difference between the local commercial rate for the tael and the official rate. By doubling the number of cash per tael which the people must pay, and retaining half for his own use, the magistrate manages to increase his salary to a living sum.

Besides the bank notes which have already been mentioned in connection with the banks above, some of the provinces issue provincial notes. For example, as already stated, the province of Hupeh issues one-dollar notes, payable on demand in the Hupeh dollar, one of the best silver dollars issued in China and substantially equal in weight and value to the British dollar of Hongkong. There is said to be a large silver reserve back of these notes, although there is no specific requirement in the law as to the amount of this reserve. So far, however, there has been no trouble regarding their redemption, and the notes pass at par.

In the province of Honan the provincial government issues bills for a thousand cash (say, $0.50), and even for sums as small as 500 cash (say, $0.25). These notes have been in circulation for some five or six years, pass at par with silver, and are redeemed regularly at par by the Government. Although there is no provision made for their direct redemption in the outlying cities, nevertheless the local magistrates at times receive them in payment of Government dues.

The above statements with reference to the methods of doing business in China, both in connection with the foreign trade and with the local trade in the interior, show beyond question the dire confusion which exists in connection with the use of money and the very great advantage that of necessity would come if a uniform system were provided throughout the country. The question as to the relative advantage or disadvantage of having the system on a silver basis or on a gold need not be discussed here, as that is taken up in detail in Appendixes A, I and II.

OPINIONS REGARDING THE MONETARY SYSTEM.

A factor of possibly equal importance with actual business conditions, however, is that of the opinions of business men and of the common people who are doing business in a small way. If they are content with their present system, the change will come slowly. If, however, they are intelligent, and their content simply comes from the fact that they have never thought of anything better, there is no reason why they should not readily adopt an improvement when its

advantages, as compared with those of the present system, are once clearly put before them.

(*a*) *Foreigners.*—Among the foreign business men of all nationalities in China there is practically but one opinion regarding the grave evils connected with the present monetary confusion and the need for reform. As has already been explained in the first volume of the Commission's report, the foreign chambers of commerce of Tientsin, Shanghai, and Hongkong have discussed the question, and have urged upon the Chinese Government the desirability of bringing about a reform as soon as possible. Acting largely on their suggestions, also, the treaty commissioners of the United States, Great Britain, and Japan, in making their new commercial treaties with China, brought forward this question, and secured in their treaties a section which pledged the Chinese Government to establish a uniform monetary system, the coins of which should be legal tender throughout the Empire. Nothing was said in the treaty as to whether these coins should be silver coins with their value fixed by the weight, or whether they should be given a gold value, and be themselves really token coins.

The only point of difference that appears in the discussions regarding the monetary reform among the foreigners in China is as to the method by which such a reform should be brought about. All are agreed that the system should be a uniform one throughout the Empire. All are agreed that the imperial coins should be legal tender everywhere in the Empire and should be received by the Government at full value in the payment of Government obligations. All seem likewise to agree in the opinion that these coins should be given a gold value.

The one question at issue is whether this gold value can be given the coins at the time they are issued, so that the new system may really be inaugurated on the gold basis, as was done in the introduction of the new monetary system in the Philippine Islands, or whether this is too much to expect from China, and whether it would be best to strive simply for uniform silver coins, with the hope that some time or other, in some unknown way, these coins might be given a fixed value in gold. The merits of the two plans are discussed at length in Appendix A, II. It is worthy of note, however, that a good many of the foreign residents who had formerly been of the opinion that it would be useless for China to attempt to begin the system on a gold basis, after a more detailed study of the question in connection with the American commissioner, changed their views and said that they believed that the American plan was entirely practicable, and that, on the whole, it would be easier than the plan advocated by themselves earlier, provided China intended to attempt at any time within a reasonable period to give to her silver coins a fixed gold value.

(*b*) *The Chinese.*—In speaking of the opinions of the Chinese regarding monetary reform, one should keep in mind separately, first, the officials; second, the larger business men; third, the common people.

THE OFFICIALS.

Speaking generally, the officials at the time the American commissioner visited China had not studied the question at all carefully, and of course most of them have not studied it at the present time. In the next section certain characteristics of the officials in connection with their governmental work will be brought out, but it should be mentioned here that the officials, from their training and from their practice in governmental matters, have very little knowledge of business or of business methods excepting so far as they concern the collection of taxes and the expenditures which they make. Even in these matters, however, they deal, not in accordance with what are ordinarily called business principles, but rather in many cases in an arbitrary way, so that their experience gives them little insight into business principles. It is not meant to assert, of course, that the officials are not men of ability. In very many cases, in doubtless all cases, so far as the higher officials are concerned, the men have ability, often of a very high order indeed, but their minds have been turned in other directions and they often exhibit most astonishing ignorance of the most fundamental principles of monetary science.

The central Government demands of its officials, as a rule, that there be no disturbance in their provinces or districts, and that the people, so far as possible, be kept content and prosperous. If there is no complaint from the locality, the official is ordinarily considered successful. The effect of this attitude of the central Government is, however, always in favor of the maintenance of existing conditions, and is decidedly against the making of experiments which may possibly prove unfortunate.

Most of the higher officials had some knowledge of the intentions of the central Government toward monetary reform on account of the provisions in the foreign treaties, and they had heard the matter somewhat discussed. Many of the lower officials, however, even some as high in rank as the governors of provinces, had merely heard the question suggested and had never attempted to look into the matter at all carefully. Such men, of course, had no information whatever.

Those who had heard the question discussed naturally found their first inclination in favor of changing the present system as little as possible, or of adapting the new system in some way to the present one, so that the people would not notice any material change. In consequence, if they were people who had dealt largely with persons in the interior, they were inclined to believe that it would be wise

for the new unit to be the tael, provided a uniform system were adopted. The higher officials who had any information on the subject were unanimous in the opinion that some uniform system should be established, although they did not hesitate to say in many cases that it would be very difficult to establish such uniformity on account of the probable unwillingness of the viceroys to give up the profits from their provincial mints, and their belief that the central Government, if it assumed the management of the mints, would deprive the provincial officials of these profits.

The higher officials, who had been more or less familiar with foreign trade from residence in the treaty ports, or who had recognized the disadvantage under which China had been placed in the payment of the indemnity and of the foreign loans on a gold basis on account of the fall in the price of silver, were quite generally of the opinion that the new system should be not merely a uniform one throughout China, but that it should be placed on the gold basis as soon as that could be done. With their idea that changes should be made as gradually as possible, and that old customs should be adhered to as long as possible, they rather inclined at first to think that it would be better to begin the system with the coinage of silver and copper coins, which should gradually be made uniform throughout the Empire, and that later on the question of giving to these a gold value should be taken up. They had, however, with practically no exceptions, not studied carefully the matter of making the change, and had no knowledge of what such a plan involved. In many cases they had apparently taken their views from publications of some of the English business men mentioned above, some of whom have since changed their own opinions on the question.

It is interesting to note, also, that some of these same officials, when the matter had been thoroughly discussed with them, and particularly when the relative costs of the two methods had been presented to them as outlined in Appendix A, II, changed their views, and said frankly that they believed the Chinese Government would be compelled either to adopt as a whole the plan recommended by the American Commission, or to abandon entirely for the present the idea of securing any but a silver system. More and more, however, of the leading thinkers among these officials, as they studied the question, gradually came apparently to the view that it would be wise, if a sufficient support could be secured from the viceroys, to adopt the plans of the American Commission, and to put them into effect as soon as that could conveniently be done.

The chief objection apparently in their minds and the one which it seemed most difficult to remove was the apparent necessity of employing foreigners as experts to advise regarding the management of the new system. They felt that since a system on the gold basis was so

decidedly different from anything that they were accustomed to, no Chinese officials had sufficient expert knowledge to put it into effect. Naturally, from their unfortunate experiences with foreigners, they hesitated to give into the hands of foreigners any more control than should be necessary in a matter so important. Naturally, also, they suspected decidedly the motives of foreigners who were offering assistance and giving advice. As the plans of the American Commission developed, however, it is interesting and important to note that the suspicion apparently gradually waned until, when the motives of the American Government were clear, it disappeared. Those who studied the matter thoroughly with the United States commissioner seemed to be convinced finally of the fact that the United States Government had no designs whatever upon the sovereignty of the Chinese Empire, and no thought of attempting to secure control of the monetary system, and that it was expecting to derive its benefits from the reform solely from the improved business conditions which would result if the reform were put into effect.

Even when this matter apparently became clear, it is probable that there was some feeling on the part of some of the officials at least that, if the system recommended by the American Commission were adopted, it would deprive them of some of the power and prestige which they would enjoy under a system which could be managed by themselves without foreign expert assistance.

The experience of the Chinese Government with the imperial maratime customs service was evidently in the minds of many of the officials. Although the customs service is managed by Sir Robert Hart with the greatest ability; although the Chinese officials appreciate this fact and trust Sir Robert's integrity; and although they recognize very many of the benefits which have accrued to China from its efficient management, they still feel that the chief credit for this management has gone to foreigners; that Sir Robert has so managed the service that its power through the high offices is entirely in the hands of foreigners, and that apparently no effort has been made so to train native Chinese that they may gradually take control of the management of the service, and ultimately replace the foreigners. They feel very bitterly in many instances toward Sir Robert and the foreign management, because they see no likelihood of the Chinese being able in the near future to replace the foreigners in that service. They are determined that no other similar opportunity shall be given for foreigners to secure control of another important department of Chinese administration. The motive which they assign is naturally a patriotic one. They believe that Chinese matters should really be managed by the Chinese and for the Chinese. Little fault can be found with them for having this feeling.

The foreign critics of the Chinese officials, and in part the native critics as well, are, however, of the opinion that their chief grievance is of a different nature. As has been intimated in the discussion of the tael system, and of the methods by which the local officials obtain their salary through fixing special official rates of exchange different from the commercial rates, the system of securing salaries and incomes in indirect ways is widely developed among the Chinese officials. This system of securing profit by indirect methods, such as that indicated by commissions or other similar plans, usually classed together under the one general head of the "squeeze," is very widely extended even outside of official circles. One's servant, for example, receives rather low wages, but he expects to supplement these wages by taking a small commission on everything that he buys for his employer. If he goes with his employer to make a visit he expects to receive fees from the host. The commission which he takes is ordinarily pretty well fixed in custom, and, as a rule, he takes only the customary fee and doubtless does not look upon the matter as dishonest.

In large establishments, such as the legations or the hotels, when local dealers in curios or other goods which the foreigners or well-to-do Chinese buy, come to the establishment to make sales, the head boy or general managing servant always expects a commission on all purchases made. This commission is then divided in an agreed upon percentage with the other servants. When the commission runs from 5 per cent up to as high, perhaps, as 20 per cent in the case of sales made at hotels frequented by foreigners, it can be seen that the servant's wages are often decidedly increased through the "squeeze." When the official makes purchases for the Government, often he also expects to take his squeeze. As has been said, when he collects taxes he collects enough so that the squeeze can be retained after the taxes are paid into the central treasury, and so on.

It has been thought by many that the chief objection of the officials to the introduction of a uniform monetary system came from the fear lest the squeeze system would thereby be seriously interfered with. One source of income has been the exchange, money being paid out, for example, in one kind of tael and charged up to the Government in another kind, somewhat heavier, the official making the difference. For example, the K'up'ing tael is heavier than the T'saoping by 2 per cent. The Siangping tael is 2 per cent lighter than the T'saoping, and of course any of these taels are considerably heavier than a Mexican dollar. It is a common saying in Nanking among students who receive prizes that "the prizes are awarded in K'up'ing, the examining official pays them in T'saoping, the minor officials distribute them in Siangping, and by the time it reaches the student the tael has be-

come a Mexican dollar, which, on being exchanged, is found to be bad."

It has been thought also that whereas now the taxes are levied in taels, of which the rates of exchange in cash can be made to vary almost at the will of the local official, this source of profit would be taken away if the Government were to make one uniform coin, either tael or dollar, for the whole Empire, and were to make minor coins as decimal parts of this, of which the value would be maintained uniformerly everywhere in the Empire. It is believed that on acocunt of this lessening of the opportunity for squeeze on the part of the officials many of them will be opposed to any reform.

This objection is not necessarily valid. In the first place there are doubtless many individual officials, particularly those of the higher ranks, who make, relatively speaking, little, if any use of the opportunity for profit which may come from the fluctuating rates of exchange. It is these higher officials whose opinion will, in the long run, be decisive.

In the second place, there seems to be no especial need for connecting the two subjects, provided the Central Government takes practical note of the conditions and attempts to meet the issue fairly. As a matter of fact at the present time, where this form of the squeeze is employed, the taxes are actually paid by the people in copper cash, although they may be levied in taels or in fractions of a tael. If the Government were to take the position, therefore, that the customary taxes as paid heretofore in cash should, for the time being, remain unchanged, in cash; that the local official should return to the central treasurer the same amount that he had returned heretofore, and that he should simply account for the balance as an addition to his own salary, there would be practically no change from present conditions beyond a new item in the matter of bookkeeping. It would, of course, be desirable, if not essential, that the percentage retained for added salary should be made practically uniform for officials of the same rank in the same sections of the country. That might result in comparatively slight changes in the rates of squeeze in different localities, but not enough materially to affect the situation. If the Government were to take up the question openly and fairly, with an attempt to dispose of it in the way indicated, there can be little doubt that many of the officials would be glad to join with their superiors in the reform. The system of squeeze is now, generally speaking, not recognized as a form of dishonesty. On the other hand, it is recognized as a source of many abuses, and the more intelligent, more energetic, and more patriotic officials would prefer to have the matter regulated and made uniform.

So far as the officials are concerned, then, the matter may be summed up by saying that the most intelligent ones, and particularly those

most conversant with the relations of the Government with other countries and with international trade, believe that there should be a monetary reform which should give a uniformity to the coins throughout China, and which preferably should give to the new coins a fixed value in terms of gold.

A very few, while believing that the system should be uniform, think it would be better to leave it on the silver basis, on the ground that the export trade would be encouraged thereby, and that it would be equally as well, if not better, for Chinese interests. It should be noted, however, that many of this class have changed their opinion on further study of the question; and there can be little doubt that the trend of discussion is in the direction of the gold standard.

A goodly number of them, from their natural desire to move slowly and to change existing conditions as little as possible, would favor the adoption of a uniform silver standard first with the hope that it might ultimately go to the gold standard. Many of this class also seem to have been converted to the idea that it would be better to begin with the gold standard.

A comparatively large class of the lower officials probably would look askance at a reform which they feared would deprive them of their squeeze. This class, however, is not made up of the most intelligent and most influential officials, and the objection could probably be fairly met. Of greater importance, however, is the fear of some of the higher officials that if the Central Government took complete charge of a uniform monetary system it would deprive the viceroys and governors in the different provinces of the profits which they now derive from their separate mints, and that the Central Government would not make proper compensation for this profit which it had taken. The solution to this difficulty, which is a real one, is, of course, that the Central Government deal fairly, not to say liberally, with the viceroys when it takes control of their mints.

CHINESE BUSINESS MEN.

For Americans who are not accustomed to conditions in oriental countries, where the form of government is somewhat despotic, it is important to keep in mind that the Government officials and the business men have practically no personal association one with the other. The official stands socially in a separate class from the business man, and has nothing whatever to do with him excepting in connection with tax collecting, with work in the courts, or in some other official way. He looks down upon the business man as one distinctively lower in the social scale than himself, and it is to be feared, in too many instances, as one that may perhaps be used as a source of profit.

The business man, on the other hand, who in his business dealings,

as we have seen in connection with the discussion of banking, is, as a rule, honorable, scrupulously careful with reference to living up to his contracts, and inclined to do business in accordance with the customs of his trade, stands in awe and often in well-founded fear of the official. He knows that if he opposes the official too openly he is likely to be made to suffer for it. In consequence, there is no sympathy between the classes. The officials are not inclined to consult the business men with reference to a matter so important to trade as is the reform of the monetary system, while the business men, on the other hand, are quite of the opinion that if the officials attempt to carry out any reform of the monetary system themselves they will do it with an eye single to their own interests, and not to the interests of business. It is important, therefore, to note the attitude of the business men toward the reform itself, and then to consider their opinions as to its practicability.

The business men have little confidence in the good faith of the Government, or in the ability of the Government officials. They do not hesitate to cite instances where the Government has practically repudiated its bonds, when those bonds were taken by the Chinese business men, although the Government has regularly paid its obligations due to foreigners. Even the Chinese officials themselves, at times, make this distinction between treatment of the natives and treatment of the foreigners, being much more careful not to offend the foreigners.

(*a*) Of the numerous Chinese business men who were consulted concerning the monetary reform, a few, and only a few, were of the opinion that it would be wiser for China to remain on the silver standard. Those thought that the silver standard, especially if silver were depreciating in value, would tend to stimulate the export trade, and in that way to further Chinese interests. They were, however, entirely ready to listen to argument on the question, and many of them certainly it would not be difficult to convince that the fixed rate of exchange would be preferable. Their arguments are answered in Appendixes A, I, II, and III, 1.

(*b*) A few wished to retain the silver standard for speculative purposes. They say that they like the risks of business; that business is more exciting when exchange is fluctuating; that they like to take the chances of making high profits from exchange; and that they are willing to take the losses that come when they make mistakes.

Some of those, however, while saying this as regards their individual preference, were willing to add that it was much better for business as a whole to have the rate of exchange stable; that they thought the interests of the country would be furthered by the stable rate, and that the Government ought to consider the interests

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of the whole rather than the interests of the few who would gain by speculation.

(*c*) A large majority, however, of the business men who were consulted, and particularly the most important business men, such as, for example, the President of the Bankers' Guild in Shanghai, the President of the Chinese Chamber of Commerce in Hongkong, and other important bankers and merchants, were decidedly of the opinion that a stable rate of exchange was best, and that it would be best for the Government, in the reform of its monetary system, to give to the new coins from the beginning a fixed value in terms of gold.

These business men were very intelligent and seemed to have little difficulty in grasping clearly the points of the plans of the American Commission when they were explained to them. Most of them, of course, having been trained in the present Chinese system, and not having studied thoroughly monetary principles, did not know about the plan beforehand. They, however, grasped it very readily when it was explained, and with rare if any exceptions, when they understood the system, they said that they would favor it, and that the Government would do well to adopt it.

With reference to the banking interests their opinions were particularly interesting and valuable. As regards the exchange bankers, whose chief profits consisted in transferring money and credits within the Empire itself, it was said that the reform would affect their interests comparatively little either way. They took their pay regularly in the form of a commission on the exchange, and they could get their pay as readily under one system as under another.

Some of the large loan bankers said that they would decidedly prefer the fixed rate of exchange, because there would be fewer bankruptcies, and, in consequence, they would lose less under that system than they do now. The regular rates of interest need not be changed.

They thought the small cash shops, whose profits now come practically entirely from exchanging from one form of money to another, would be opposed. Both they and the higher officials said, however, that the cash shops were small affairs, dependent largely upon the more important bankers; and that, if the bankers were in favor of the reform, the object of the cash shop keepers would be of slight consequence.

A prominent member of the great guild of the Shan-si bankers expressed himself as very strongly in favor of the reform and decidedly in favor of the plan of the American Commission. When he was asked whether he thought the guild as a whole could be persuaded to cast its influence in favor of the reform and to aid the Government in carrying it out, he said that he saw no reason why the guild should not be willing to aid in the matter. It was his opinion that if the Government would undertake the reform, and if the Controller or

other persons who understood the subject thoroughly and some of the higher officials who were in general charge of the system should visit the heads of the guild and explain the matter to them thoroughly, arrangements could in all probability be made with them for giving their hearty support and assistance in carrying the system into effect.

RELATIONS OF OFFICIALS AND BUSINESS MEN.

The difficulties coming from the lack of sympathy and community of interests between the different classes can be best explained, perhaps, by giving the opinions of some business men regarding the establishment of a national bank for China, and their readiness to subscribe for its stock. This question was discussed with representatives of more than sixty guilds, including representatives of important banks and bankers' guilds in Canton, Shanghai, Peking, and elsewhere. The opinion was generally expressed that in the carrying out of such a reform a national bank for China would be of great assistance. The business men said also that they had considerable money which they would be willing to invest in such a bank under proper conditions. With substantial unanimity, however, they agreed that the bank would fail if its management were left in the hands of the officials, and that in consequence they would be entirely unwilling to make any subscription unless the management should be confided exclusively to business men with one or more foreigners as managers.

When asked whether they would object to the Government laying down the general lines of policy for the bank, in order that it might be sure that the Government's interests would be subserved, they replied that they had not the slightest objection to living up to proper, well-understood regulations which should be made beforehand by the Government, such as are common in other countries; that, furthermore, they would not object to the Government appointing inspectors who might follow every action of the bank, in order to see that the regulations were fully carried out. On the other hand, they would not subscribe money or take any part in the management of the bank if a high Government official were to be a member of the board of directors, so that he could hear the discussions and take an active part in determining the policy of the bank. They asserted that their reason for taking this position was that they could not act freely and in accordance with their best judgment if any high Government official was present.

As one man expressed it, if one director who was a Government official should say "go east," and say six other members of the board, who are not officials, should want to go west, the whole board would go east. The one vote of the official would determine the action of the

bank against the unanimous opinion of the other members of the board. They would ultimately vote with him. The reason for this, he said, is that the Government official, if his policy were not followed, might very readily make complaints to the Government authorities against the other members, have them arrested, their property confiscated, and themselves perhaps imprisoned without any fault of their own. They could not, they said, take such risks; they were entirely willing to live up to the law, and for the Government to take pains to see that they did live up to the law; but they could not and would not attempt to join in an important business with a high Government official.

One reason also why they insist upon having a foreign manager equal in power to a native manager is for similar reasons. If a high Chinese official were to demand a loan from the bank, a native manager would not dare refuse him alone. If, however, it required also the consent of the foreign manager to carry out the transaction, they could count upon the foreigner being independent, inasmuch as he and his property would not be subject to seizure and confiscation on the complaint of the Government official. The loans, therefore, to the officials from a national bank with a foreign manager could be made on a strictly business basis, as was proper. Without a foreign manager this would not be the case.

When these opinions were reported to the high Government officials, most of them stated that it was unfortunate that the business men were not better acquainted with the higher Government officials and did not understand them better. They would then trust them more fully. They recognized the fact, however, that this lack of confidence did exist, and said that the Government must get the confidence of the business men before the system could be a success. The business men say that this confidence can be secured only by a proper law which shall give sufficient power to business men and foreign experts, and which the Government will itself live up to carefully; that the Government can secure this confidence in no other way. Some of the high officials, when talking alone and privately with the American commissioner, said that the business men were entirely right; that it would not be safe for them to risk their money except under the conditions which they had themselves laid down, and that any person who knew thoroughly the conditions in China must agree with the Chinese business men.

Not only do the higher important business men refuse to unite with the Government officials in business, as intimated above, but, speaking generally, the common people are also afraid of the magistrates, and distrust them in their dealings. The statement was made frequently, in fact almost or quite universally, by not only business men, but also by the higher officials themselves, that it would be much better,

if it could be so arranged, to introduce a new coin for use among the people through the banks and business men instead of through the officials. The people, it was said, mistrust the officials and would hesitate to accept a new kind of money from them, whereas they would not hesitate to deal with the native bankers and business men and would accept a new kind of money from them without hesitation, if they were sure regarding its value.

THE COMMON PEOPLE.

It has been intimated elsewhere that the common people in China are so accustomed to trading in different kinds of currency—taels of various weights, cash of various kinds, and notes of different values—that they would probably adopt a new good system as intelligently and use it from the beginning with as few mistakes as would any other people. It should not be thought, as in the case sometimes, that people in general need to understand a monetary system in order to use it properly. Probably no people understand fully their own system. That is not necessary. The average man needs to be able to recognize his country's money, and the relative value of one piece to another, nothing more from the business point of view. A few men, those managing the system, need to understand the principles of money, to know the amount on hand in the treasury, the approximate circulation, the relations with the banks, etc., but there is no reason why the masses should understand all these things in order to do business. The Chinese will understand as readily as Americans or Europeans, probably more readily. Nothing better is needed.

THE DEALINGS WITH THE GOVERNMENT.

As has been explained in the Commissioner's report, page 16, when the special commissioner for China reached Peking, he was informed that a special monetary commission had been appointed to deal with the whole subject of monetary reform. The members of the commission are the following: The Prince of Ch'ing, Chü Hung Chi, Natung, Wang Wen Shao, Jung Ching, Lu Chuan Lin, Ching Feng, Chen Pau Jui, Tseng Chung, Tai Hung Tzu. Besides these members, partly ex officio, a special committee consisting of the following executive and consulting officers had been selected to take up the subject for detailed discussion: Ch'en Pi, Hsü Shih Ch'ang, Chang Yün-yen, Jui Fêng, Lei Pu T'ung, Wang Ching Mu, Shao Yen. The president of the whole commission, who is also the actual head of the Government under the Emperor, was the Prince of Ch'ing. It is he who would, of necessity, present in behalf of the grand council any memorial to the Emperor or any decree for promulgation as law. He stated that this special committee would consider fully the sugges-

tions of the American Commission, and would then talk them over with the higher officials, more particularly with the two presidents of the Board of Revenue, and with His Excellency Natung, who had been sent the preceding year as special commissioner to Japan to study its monetary system, and who, in consequence, besides being a man of great ability, had presumably more special knowledge of the subject than the presidents of the Board of Revenue. The special committee had no authority beyond that of discussion and report, although, of course, its members were at liberty to express their individual opinions and often aided the discussion very much by so doing. The opinion of the presidents of the Board of Revenue and Natung, so the Prince said, would be practically decisive, in all probability, as he would expect to accept their advice.

Discussions with this special committee and occasional meetings with the three higher officials mentioned above were carried on several times a week from June 25 until August 26, when the American commissioner was compelled to leave for home. As has been explained in the report, the commissioner was treated with the greatest courtesy by all these officials throughout. At first it was evident that both some of these officials and the officials elsewhere throughout the country, who were visited by the commissioner, had some suspicions as to the worthiness of the motives of the American Government in presenting their plan, although those best informed, who knew that the American commissioner was there as the result of the invitation issued by the Chinese Government, naturally had fewer suspicions. As the meetings went on and the plans were more and more developed, and as it became evident that the Government of the United States was asking for no special advantages, and that the benefits to it were expected to come only through the improvement of conditions in China, these suspicions seemed to vanish entirely, and the later meetings were characterized by the greatest cordiality and personal sympathy throughout. The new Chinese President of the Board of Revenue, His Excellency Chao, as explained before, took the greatest interest in the subject, and apparently still continues his interest in the matter. It is believed that a considerable number of the special commission, if not indeed all of them, believe that the plans of the American Commission are wise and practicable, and that they can be carried into effect as soon as a sufficient number of the viceroys and other influential people shall have studied the matter enough to see its significance. Of course, as the members had no right to express any official opinion, and as they could not take any vote on the matter, their opinions can be gauged only from the tone of the discussions. There is no reason, however, to believe that in this way their opinions were not gauged with a reasonable degree of accuracy.

Appendix A II contains, in outline, the substance of most of the discussions which were held with this Commission, although naturally the discussions were much fuller than would be indicated by the outline, and it is not possible, of course, here to present the arguments and questions of the Chinese members of the Commission.

As has already been explained in the report, the results are, on the whole, fairly satisfactory. Many of the higher officials and the Prince of Ch'ing express opinions strongly in favor of the American plans.

On the whole, the American Commissioner feels, as the result of many assurances from both foreigners and Chinese officials, that the work in China has been productive of very good results, and that, even if the Chinese Government does not immediately take up the system proposed by the American Commission (a result indeed that is hardly to be expected), it has, nevertheless, been saved from a good many mistakes which it was clearly about to make beforehand, and that a system quite similar to that proposed by the American Commission will in due course of time be adopted. Indeed, since parts of this report have been in the printers' hands word has been received by the American Commissioner direct from officials who are among the most influential in China that, in spite of discouraging delays and even some discouraging indications, the persons favoring the reform may be confident that the proper plans will be carried through ultimately, and that they need simply to cultivate the patience which is often required in dealing with conditions in China where, owing to the looser form of government organization, any great changes must be made with great deliberation.

APPENDIXES.

Appendix A.

CHINA.

I. MEMORANDA ON A NEW MONETARY SYSTEM FOR CHINA.

By Jeremiah W. Jenks, Commissioner in China.

I. NOTE FROM THE CHINESE CHARGÉ D'AFFAIRES TO THE SECRETARY OF STATE OF THE UNITED STATES OF AMERICA.

Mr. Shen to Mr. Hay.

No. 277.]

CHINESE LEGATION,
Washington, January 22, 1903.

SIR: Referring to my note No. 276, of the 19th instant, in which I informed you that I had received instructions from the Imperial Government relative to a proposed plan looking toward an international concert of action bearing upon the monetary question, I have the honor to submit to you the accompanying memorandum containing the views of my Government relating to the above-mentioned subject.

It is the confident hope of the Imperial Government that the subject-matter of its memorandum may receive the careful consideration of the Government of the United States, and that such steps may be taken as it may deem proper toward bringing about the desired end, to the mutual benefit of all concerned.

Accept, sir, etc.,

SHEN TUNG.

[Inclosure.]

MEMORANDUM.

The serious results which are threatened by the recent fluctuations in the value of silver bullion to the commerce, both of gold and silver standard countries, have induced the Chinese Imperial Government, acting in concert with the Mexican Government, to ask the cooperation of the United States in seeking a remedy for these conditions for the mutual benefit of all concerned. Safe and profitable trade between any two countries is dependent to a considerable degree upon relative stability in the value of their currencies. This stability is destroyed in the trade between a gold-standard country, like the United States, and a silver country, like China, when the variations

in the gold value of silver, as was the case during the year 1902, reached nearly 10 cents an ounce in gold in a single year, or nearly 20 per cent upon the price of silver bullion.

The problem of securing relative stability of exchange between the gold and silver countries is one whose importance is not limited to silver countries, but comes home with force to all those gold-standard countries which are seeking markets for their products in silver countries and are seeking the extension of their trade in the Orient. The importance of this trade is indicated in some measure by the following table of the imports into certain silver-using countries for the latest year for which data is obtainable, based in some cases upon official figures, and in others upon those presented in the Statesman's Yearbook for the year 1902, reduced to round figures in American gold coin:

Imports of certain silver-using countries.

China	$196, 934, 342
Mexico	65, 083, 451
Philippine Islands	32, 141, 842
The Straits Settlements	150, 000, 000
Federated Malay States	18, 000, 000
Indo-China	35, 750, 000
Cochin China	24, 000, 000
Tonking	12, 300, 000
Siam	12, 600, 000
Korea	5, 500, 000
Bolivia	3, 300, 000
Colombia	11, 083, 028
Guatemala	1, 521, 900
Honduras	1, 074, 050
Nicaragua	3, 500, 000
Paraguay	1, 838, 710
Total	574, 627, 323

This large volume of imports into the silver countries, exceeding the entire annual import trade of the United States, as recently as 1879, comes almost exclusively from the gold-standard countries which are engaged in the manufacture of finished goods for the world's markets and are profoundly interested in the extension of those markets. The table given does not include British India and several silver countries in South America which might become parties to an engagement for giving stability to the relative value of the money of gold and silver countries.

It will be noted that the largest amount of imports in the table given above is credited to the Chinese Empire. This large volume of trade is threatened in the present state of the Chinese fiscal and currency systems with a decline, the limit of which no one could foresee. The heavy indemnity imposed by certain of the powers upon the Chinese Government has led to large offerings of silver on the Chinese market and has diminished the power of that country to purchase foreign goods to a point which threatens to materially reduce the existing export trade to China from the United States, Great Britain, France, Germany, and other countries.

The foreign trade of China, while standing at the head of the above table in the order of magnitude, is small at present in proportion to the population and resources of the Chinese Empire. The exports

from the United States to China have multiplied many fold within twelve years, and now exceed 24 million dollars. The present volume of imports of merchandise into China, however, amounts to only about 50 cents per capita in gold, and affords but a slight measure of what the trade of China might become if expanded in the future as rapidly as even that of Japan, which has advanced in ten years from about $1.25 to nearly $3 per capita. An import trade of $3 per capita for the Empire of China, with its nearly 400 million people, would represent the enormous sum of $1,200,000,000, or one-third more than the largest amount ever attained by the import trade of the United States. The encouragement of a commerce so important as this seems to the Chinese Imperial Government to be worthy of the most serious consideration of the Western powers. It would afford an outlet for the produce of the labor of many thousands of workers of Europe and America, and employment for many millions of the capital of those nations, and would dot the Pacific and Indian oceans with the flags of a carrying trade as large as that now required in the entire commerce between Europe and the United States.

While a readjustment of the currency of China upon a stable relationship with that of the gold-standard countries would not in itself, perhaps, accomplish so tremendous a revolution as would be involved in the creation of a trade of more than a thousand millions, yet it would be one of several steps in that direction which would contribute greatly to accelerate an event of such paramount importance to the capitalists and the producing masses of the Old and New Worlds. The necessity is becoming more and more keenly felt by American and European manufacturers for the opening of new and the extension of already existing markets in every direction for the absorption of their goods, in order that means may be found for relieving overproduction and affording profitable returns to the investment of capital. China, with her immense population and consequently large potential capacity for absorbing foreign products, offers a most important field for American and European manufactures, the ready absorption of which would tend to relieve overproduction and contribute materially to the prosperity of the manufacturing nations.

If results such as these are within the range of the influence of a reorganization of the monetary system of China, in harmony with the system of other powers where silver is the principal money in use, it is evident that the Chinese Imperial Government acts from no narrow and selfish motive in asking the United States and the Republic of Mexico to join her in seeking an international arrangement for securing greater fixity of relationship between the moneys of the gold and silver countries.

Questions of finance and economics should be considered in all their bearings, with due attention to their far-reaching effects, and not merely upon results which bring immediate benefit. Important as are the indemnity payments to the several powers, and ready as China is to meet them to the best of her ability, they represent but a trifling proportion of the benefits which may be derived by the Western powers from a policy which would give to China a permanent uniform monetary system, and make her a wide market for the products of American and European factories and workshops.

It is with a view to finding a remedy for the monetary causes which threaten to retard this development, and to preserve the export and carrying trade of the leading manufacturing nations to the silver countries, so that trade may not lose its healthy activity, and confidence may be restored to investors and manufacturers, that the cooperation of the United States is asked in representations to other leading powers in favor of international concert of action on this subject. The Government of China does not seek the restoration of the free coinage of silver by either the gold or silver using nations. It is recognized by this Government that bimetallism in the sense of the free coinage of both metals is a policy which has been definitely discarded by leading powers of Europe and by the United States, and that it would be futile to propose its restoration.

It is, therefore, not the expectation nor the wish of this Government that the gold-standard countries should take any action tending to impair their monetary standard or to make material changes in their monetary systems. It is desired that the governments of gold countries having dependencies where silver is used and the governments of silver countries shall cooperate in formulating some plan for establishing a definite relationship between their gold and silver moneys, and shall take proper measures to maintain such relationship. One such plan, it is reported, has already been proposed in both Houses of the Congress of the United States with reference to the Philippine Islands. It is this and other plans designed to accomplish the same end which the Government of China would be glad to have considered by the United States and other governments, with the view to the adoption of the best attainable monetary arrangement by those countries which are not prepared under existing conditions to adopt a currency system involving the general use of gold coins.

The cooperation of the United States with the Chinese Imperial Government and with the Republic of Mexico in presenting this subject to other governments would, in the opinion of this Government, aid greatly in securing a prompt and satisfactory solution of an economic problem which threatens the ruin of the silver-using countries on the one hand, in the vain effort to meet increasing gold obligations abroad, and which threatens also the commercial prosperity of the gold-using countries by destroying the purchasing power of their customers. It would, we believe, contribute materially to the permanent satisfactory settlement of this problem if Great Britain and France, with their important colonial possessions in Asia, and if Germany and Russia and other countries having large commercial and territorial interests there, would unite with the United States and China in the adoption of a common standard for a new coinage system in the silver countries; in recommendations for the readjustment of the fiscal and monetary relations of China with the other powers which would permit that country to continue to be a user of silver and a purchaser of the products of the manufacturing nations; and in such provision for their own subsidiary currencies as would tend to promote stability of relationship between their gold and silver money. The Chinese Imperial Government will welcome the cooperation of the United States in this matter in any form which may be acceptable to that power, and earnestly prays that the subject may receive the prompt and serious consideration which, in the opinion of this Government, it merits.

II. MESSAGE FROM THE PRESIDENT OF THE UNITED STATES,

TRANSMITTING

A REPORT FROM THE SECRETARY OF STATE, WITH ACCOMPANYING NOTES FROM THE MEXICAN AMBASSADOR AND THE CHINESE CHARGÉ D'AFFAIRES AD INTERIM, WHICH SEEK THE COOPERATION OF THE GOVERNMENT OF THE UNITED STATES IN SUCH MEASURES AS WILL TEND TO RESTORE AND MAINTAIN A FIXED RELATIONSHIP BETWEEN THE MONEYS OF THE GOLD-STANDARD COUNTRIES AND THE SILVER-USING COUNTRIES, ETC.

To the Senate and House of Representatives:

I transmit herewith a report from the Secretary of State, with accompanying notes from the Mexican ambassador and the Chinese chargé d'affaires ad interim, which seek the cooperation of the Government of the United States in such measures as will tend to restore and maintain a fixed relationship between the moneys of the gold-standard countries and the silver-using countries.

I recommend that the Executive be given sufficient powers to lend the support of the United States, in such manner and to such degree as he may deem expedient, to the purposes of the two Governments.

THEODORE ROOSEVELT.

WHITE HOUSE, *January 29, 1903.*

The PRESIDENT:

I have the honor to submit herewith a translation of a note from the ambassador of the Republic of Mexico and a copy of a note from the chargé d'affaires of the Imperial Chinese Government. Both notes ask the cooperation of the Government of the United States in such measures as will tend to restore and maintain a fixed relationship between the moneys of the gold-standard countries and the silver-using countries. It is not asked that the United States modify its monetary system, and it is distinctly disavowed that any movement is contemplated for the restoration of international bimetallism. The opinion is expressed, however, by representatives of both Governments, that consultation between the United States and European powers having dependencies in the Orient, and the independent countries where silver money is in general use, may result in the adoption of a monetary system which will prevent the great fluctuations in exchange which now occur in trade with the silver-using countries. If such a result can be achieved—and it is pointed out that at least a partial solution has been proposed in the United States in a bill now pending in the Senate in regard to the Philippine Islands—great benefits will follow to the trade of the world by making easier the access of the products of the manufacturing nations to the markets of China and the other silver-using countries.

The consideration of this subject may have an important bearing also on the payment of the indemnity due by China to certain European powers and to the United States by enabling the Chinese Empire to put her monetary system upon a basis which will make it possible for her to meet these payments in a manner satisfactory to

all the powers. This result, if it could be accomplished, would be of the first importance not only to the United States and to the other powers having a share in the indemnity payments, but to China herself and her future development.

I respectfully submit for your consideration that these communications be transmitted to Congress with the recommendation that the Executive be given sufficient powers to lend the support of the United States, in such manner and to such degree as you may deem expedient, to the purposes of the two Governments whose notes are herewith submitted.

Respectfully submitted.

JOHN HAY.

DEPARTMENT OF STATE,
Washington, January 28, 1903.

List of papers.

From Mexican ambassador, January 15, 1903, with inclosed memorandum.
From Chinese chargé, January 19, 1903.
From Chinese chargé, January 22, 1903, with inclosed memorandum.

III. SUGGESTIONS REGARDING A NEW MONETARY SYSTEM FOR CHINA.

1. The Chinese Imperial Government promptly to take effective steps, satisfactory to a majority of the indemnity treaty powers, to establish a general monetary system consisting chiefly of silver coins with a fixed gold value.

2. In the establishment and management of this system China to invite and employ acceptable foreign assistance.

3. In pursuance of this plan, the Chinese Government to appoint a foreign controller of the currency, who shall have general charge of the system for China; he to have acceptable associates in charge of the mint or of such work as he may prescribe.

4. The controller to make monthly reports in detail of the condition of the currency, including amounts in circulation, loans, drafts on foreign credits, etc. His accounts (but not those of the general Government) to be open at reasonable times to inspection by accredited representatives of the powers interested in the indemnity, provided the Chinese Government judges that such a provision would be wise in order to secure confidence in the system. Such representatives, as also the associate controllers, to have the right of suggestion and recommendation.

5. The Chinese Government to adopt a standard unit of value. The unit to consist of —— grains of gold, and to be worth presumably, approximately, the gold value of a tael, or somewhat more than a Mexican dollar. Provision to be made for the free coinage of suitable pieces, multiples of this unit, 5, 10, and 20, on demand, for a reasonable coinage charge. Eventually some to be coined on Government account.

6. China to coin as rapidly as possible —— silver coins, with an appropriate device, about the size of a Mexican dollar, for circulation in the country. These to be maintained at par with the standard gold

unit at a ratio of about 32 to 1. More to be coined thereafter, according to needs, as indicated by provisions following. Subsidiary and minor coins, silver, nickel, and copper, of suitable weight and value to be provided.

7. Both the gold and silver coins to be receivable at par in payment of all obligations due to the Chinese Imperial Government in any of the provinces. When such obligations have been made in silver, the new coins may be tendered instead at their coin value.

8. The Government at its discretion, in conjunction with the viceroys, from time to time to declare, by proclamation, in the various provinces the new coins legal tender for debts incurred after a date fixed in the proclamation. Previous debts to be paid as contracted.

9. For the maintenance of the parity of the silver coins, the Chinese Government to open credit accounts in London and other leading commercial centers against which it may draw gold bills at a fixed rate, somewhat above the usual banking rates. For example, if the usual banking rate on London, under the system, were about 1 of the new coins for 2s., the Government might sell if the rate rose to 1.02 for 2s. Such drafts to be made only under the direction of the controller of the currency, but to be made on demand for all depositors of the new silver coins in sums of not less than, say, 10,000 taels.

10. Should it be necessary to make a loan for the establishment of a general monetary system with adequate exchange funds, it to be secured by sources of revenue sufficient to yield an amount which will provide for the needed interest and sinking fund, such revenues to be managed in a way satisfactory to the parties interested.

11. The seigniorage profit from coinage to be kept as a separate fund. Whenever 500,000 taels worth shall have been accumulated, it to be placed as a gold deposit with the several foreign depositaries in proportion to drafts made upon them. This process to be continued till at least ——— taels worth shall be in the gold fund on deposit.

12. For replenishing the gold fund after its reduction by drafts, the controller to honor silver drafts drawn by the foreign agents of the treasury in exchange for gold, at rates fixed by the controller.

13. Provision to be made for a banking law under which bank notes kept at par with the legal-tender currency may be issued by an imperial bank or by other responsible banks under the supervision of the controller.

14. As rapidly as is practicable the new currency to be introduced into the various provinces, the controller making use of the local governments, banks, business houses, and such other agencies as are best suited to the purpose.

15. Within five years the new system to be introduced into all the treaty ports, and as far as possible elsewhere, and all customs duties to be collected in terms of the new currency. Local taxes to be collected in new currency as fast as it is adopted in provinces, and provision also to be made for the keeping of the tax accounts under the new system.

16. The new system to be put into effect when ——— of the new coins are ready for circulation.

17. The controller and the representatives of the powers to be authorized to recommend economic reforms to the Imperial Government.

V. CONSIDERATIONS REGARDING A NEW MONETARY SYSTEM FOR CHINA.

1. ADVANTAGES OF A GOOD SYSTEM.

When the Imperial Government of China, on January 22, 1903, addressed its memorandum to the United States concerning the establishment of a new monetary system which should fix the rate of exchange between China and gold-standard countries, the Government of China doubtless fully recognized the great advantages which would accrue to it should such a reform be carried out. It doubtless also realized that such a reform would be beneficial to the nations with which it had commercial relations. It is, however, perhaps well to mention here what may be some of the advantages both to China and to the foreign countries concerned, and to note also how this movement appeared to others.

It was natural that the Government of the United States should welcome the proposition to put China upon a gold basis and should look for the cordial cooperation of the leading manufacturing and exporting nations of Europe, because such a measure promises so much for the extension of their future trade and their opportunities for safe investments. The present uncertainties, due to fluctuations in exchange, in regard to the profits upon commercial operations between the gold countries and the silver countries would be brought to an end if these fluctuations were brought within the usual limits between two gold countries. Under present conditions the importer in a silver country is compelled to live from hand to mouth and to greatly restrict his orders for goods given to European and American exporters. Investments of capital are even more hazardous, since a fall in the price of silver equal to that which occurred within a few months in 1902 would wipe out profits of 15 or 20 per cent and reduce by that amount the value of an investment made in a silver country if it were sought to withdraw it in gold.

The adoption of a stable exchange, by remedying these conditions, would unquestionably stimulate the importation into China of the products of European and American mills and factories. Many of these importations would be in the form of advances of capital for the development of the rich natural resources of China. These investments would be made in the form of rails and rolling stock for new railways, equipment for factories, and supplies for the laborers engaged in extending railways and modern industrial methods throughout China. The fact that such exportations from the manufacturing countries would not depend primarily upon the increased consuming power of the Chinese people, but upon the surplus of capital of the rich countries seeking investment, would greatly stimulate this movement in the earlier years. This was the experience of Russia and Japan when they adopted the gold standard. In the case of Russia, imports of foreign goods rose from 416,000,000 roubles ($210,000,000 gold) in 1890 to 626,000,000 roubles ($315,000,000 gold) in 1900—an increase of 50 per cent in ten years. In the case of Japan, the imports of foreign goods rose from 81,000,000 yen ($40,000,000) in 1890 to over 300,000,000 yen ($150,000,000) in

1900—an increase of about 200 per cent, even when allowance is made for the reduced value of the yen by the fall of silver.

If a ratio of increase corresponding to that of Japan were to occur in the imports of foreign goods into China, such imports would rise within ten years from 50 cents to $1.50 per capita and a market would be opened for $400,000,000 worth in American gold of the products of Europe and America, in addition to the present volume of their trade with China. While it is probable that the development of the commerce of China would not be so rapid as that of Japan, there can be no doubt that the opportunity for large trade and safe investments offered by the adoption of a uniform currency in China based upon the gold standard would afford benefits to the manufacturing and exporting nations which abundantly justify earnest efforts on their part to secure such an important economic result.

Already, at about the date of the appointment of the Commission, the importance of stable exchange in China had become a subject of discussion in the Orient and of action by several commercial bodies. Typical of these expressions is the resolution adopted on April 18 last by the Shanghai General Chamber of Commerce:

"Having in view the fact that silver is subject to violent fluctuations, and that China's financial obligations, national and commercial, are now mainly, and in future will probably be entirely, with gold-using countries, this chamber is of opinion that the treaty powers should urge the Chinese Government to take the necessary steps without delay to provide for a uniform national coinage as a first step toward establishing the currency of this country on a gold basis at as early a date as practicable."

The high authority of Sir Robert Hart, inspector-general of the imperial maritime customs, may also be invoked in favor of securing for China the great commercial and fiscal benefits of a gold standard. In a paper presented to the board of foreign affairs and printed in the North China Herald of July 3, 1903, Sir Robert Hart declares:

"It would be much wiser for China to maintain a gold standard instead of a silver one as at present, since silver has dropped down to such a degree, and moreover possesses no certain or uniform exchange, even within the limits of a single day. The hundreds of trades are all disastrously affected by the present state of the currency, while the Government having to pay its foreign debts in gold, both country and people are being plunged into the depths of financial distress. The conditions pictured in the foregoing therefore compel one to seek some plan whereby they may be ameliorated, and so make it that China, while still using a silver currency, shall so fix a uniform exchange between silver and gold that there may be no danger of uncertain fluctuations."

Such reform, however, needs to be very carefully considered from all possible points of view. Closely related to the project of establishing a definite monetary system for China on the gold basis are several subjects relating to the monetary systems of other countries of the Orient, most of which are dependencies of the leading European powers. These countries include the Philippines, under the authority of the United States; the Straits Settlements, under the authority of Great Britain; Indo-China, under the authority of France, and the dependencies and colonies of Germany in East

Africa and Asia. In support of the general objects sought, the Commission presented, therefore, to the European powers:

1. Suggestions for a monetary system for China.

2. The subject of approximate uniformity in the relationship between the gold unit and the silver coinage in China and in such other countries as may hereafter establish new monetary systems based on the gold standard.

3. The subject of establishing a certain regularity in such purchases of silver bullion as are actually required for coinage purposes, with a view to aiding the gold price of silver and eliminating, as far as practicable, the extreme fluctuations in price incident to speculation, thus rendering the adoption of the gold-exchange system much more easily attainable in countries whose credit needs strengthening.

2. DIFFICULTIES OF A CHANGE IN CHINA.

The question of a monetary system for the Empire of China is distinctly a practical one. While the establishment of a new monetary system in a country so differently situated as regards its business, governmental organization, and civilization from those of the western world would be one of great interest to all students of monetary science, nevertheless the question as treated by the American Commission on Internation Exchange is one which has to do with governmental action and with the action of business men in the near future; and, in consequence, it is to be considered chiefly from the point of view of practice. Under these circumstances it is advisable at once to realize as clearly as possible the difficulties which stand in the way of the establishment of any satisfactory monetary system in the Chinese Empire. The chief difficulties may perhaps be enumerated as follows:

1. At the present time China has no national monetary system. Indeed, it would not be too much to say that she has no monetary system at all of the type common in Europe and America. In several of the treaty ports silver coins circulate largely; in Shanghai and Tientsin, the Mexican dollars; in certain parts of Manchuria, the Russian rouble; in Canton and Hankow and in various provinces, dollars coined by the mints of the respective viceroys; and other coins are also used in different places. In many of these ports, even, as generally in the interior, instead of coins, silver shoes—sycees—or other forms of silver bars are used, which pass in accordance with their weight and fineness. In the country districts in the interior even silver is comparatively seldom employed by the Chinese, the copper cash being practically the sole medium of exchange. Even the so-called silver unit of the tael has no general validity. In Shanghai the tael means one weight of silver, in Tientsin another, in Peking another—a popular book on coinage enumerating fourteen different taels of different weights; and the tael thus varies in weight and in consequence in value in the different parts of China. Under these circumstances, of course, the question of a national monetary system for the Chinese Empire involves not merely the learning of the value of some new coin on the part of the people, as would be the case in any of the European countries, but it involves also the problem of having the people become accustomed to the use of coins which may be counted, in-

stead of silver which must be weighed. Moreover, the Chinese people are proverbially conservative and indisposed to change from the customs of their fathers. Experience both in China and elsewhere, however, shows that a people soon learn a new money system if it is for their advantage. Moreover, China has in one way a decided advantage in having no established uniform system. Her Government is under no obligation to redeem the old coins, except those issued by the provincial governments.

2. The central Government of China has not been accustomed to enter into the details of administration of local government in the different parts of China. Those details have been entrusted to the viceroys and other local officials. For the establishment of a national monetary system in any country it is ordinarily understood that the central government must be strong, and that it must exercise its authority directly over individuals throughout the country. It will be recalled that when the United States was first organized under the confederation, the Government practically broke down because the central Government could act upon individuals only through the separate States. Possibly the most essential improvement in the new Constitution was the establishment of authority in the central Government to deal on certain matters directly with individual citizens throughout the entire territory included in the United States without the intervention of local authorities. The fact that the central Government in China has not been accustomed to deal thus directly with the individual citizen in many matters will make it necessary for the success of the new system to extend somewhat this custom, and also to secure the co-operation of the viceroys and of other local authorities in order to make the system effective with as little friction as possible. There is no doubt that, by the organization of a central national bank or some similar centralized organization this difficulty can be largely overcome.

3. Of course wherever a change in the present monetary system would lessen materially the revenues of the viceroys, governors, and other officials, it would be only just that care be taken so to adjust the local revenues or the revenues of the new system that reasonable compensation would be made to the officials for the losses sustained. While the new system would tend toward needed centralization of administration, such administrative change ought not to be made unjustly without due consideration for present conditions.

It has also been suggested that a general monetary system, especially if it were founded on a gold basis, would be contrary to the personal interests of many of the local officials and of the individual Chinese bankers, that, in consequence, it would meet their opposition and would, therefore, be likely to fail. It is said that it has been the custom for the local officials in receiving the taxes and other obligations due the Government, to make profit, at times large, from the exchange of the local silver, copper, or other material employed in payment into the form in which payments were made to the higher authorities. If a monetary system were to become general and the taxes were levied directly in terms of the new coin, this profit from exchange, etc., might possibly be largely taken away.

The local bankers have also, it is said, made large profits often from themselves acting as exchange agents in making payment between individuals and between the individuals and the Government.

Some persons have even been of the opinion that opposition would be made to a new system even by the European bankers, because their business has for a long time been largely an exchange business, and a very large percentage of their profits have come from their profits in exchange. If the monetary system of China were placed on a gold basis, it is thought, these profits naturally would be very much lessened. In most cases these difficulties are not important and will make no trouble. The way in which the new system will benefit instead of injure both these classes is explained later.

3. The Government of China is under so great financial obligations on account of its foreign debt and the indemnity due the powers that any monetary plan to succeed ought to have the good will and moral support of all the great powers; or, at any rate, it must be one which will not interfere in any adverse way with the settlement of the obligations which are due to them. It is on this account, of course, that it has been thought desirable for China and those assisting her in the attempt to inaugurate a new monetary system to secure beforehand the sympathy and moral support of all the great powers interested in the indemnity. Such sympathetic consideration has already been secured by the visit of the Commission on International Exchange to Europe and Japan. The obligation of the indemnity has, of course, weakened the power of China financially for a time, but it is hoped this may be overcome.

4. Inasmuch as the stability of exchange in the settlement of payments in foreign trade is a matter of prime importance in connection with the proposed monetary system, being in fact the point on which the chief emphasis was laid by the Chinese Government in its memorandum addressed to the United States Government January 22, 1903, the plan and the method of administration in order to be successful must commend themselves to foreign business men who are engaged in trade with China. The Chinese indemnity, in accordance with the interpretation given to the protocol by several of the powers, is payable in gold and is payable through the medium of a committee of business men and bankers.

Foreigners who have money to invest are deterred from such investment in China by the danger of loss coming from the fluctuations in the rates of exchange. Persons who have goods to sell in China, not knowing what their return will be when sales are made in terms of the silver unit in China on account of the fluctuations in the value of that unit, may at times meet with losses, when on the day of the sale the terms agreed upon would secure a profit. Otherwise they must pay bankers liberal commissions for forward rates of exchange. In consequence, business men naturally hesitate about exporting to China. Between 1882 and 1902 it has been estimated in a letter by Sir Charles Dudgeon to the China Association, that silver declined in value as compared with gold 49.7 per cent; as compared with copper cash, 26.5 per cent. As compared with gold, copper cash has fallen about 32.5 per cent.

Under these circumstances any plan which is to be successful must be not merely good in itself, but, if it is to overcome these evils, it must be one which will have the confidence of both Chinese and foreign business men. The plan here proposed is in accordance with the views of the majority of the ablest bankers and business men consulted.

5. The American commissioners, in presenting a plan for a monetary system for China, represent China, inasmuch as they were appointed for this purpose on the invitation of the Chinese Government. The plan which they present is the one which they believe to be the best for China herself, the one that will probably help China the most in both her internal and her external trade, in the settlement of her foreign indemnity obligations and in other regards. The plan must, of course, be one that will in no way be detrimental to the sovereign rights of China. It should be one that will as rapidly as possible fit into the customs of the people. Inasmuch as the Chinese are not accustomed to a general monetary system of the occidental type, it has been felt that the way to accomplish this purpose most easily is to formulate a plan which will appeal directly to the motive of self-interest of the individual. As compared with other oriental peoples, for example, the inhabitants of India, or of Java, or of the Philippines, the Chinese are noteworthy for their thrift and their quick intelligence in everything that touches their self-interest. They are notoriously shrewd in matters of bargain and are ready to take advantage of any opportunity for even a slight profit. In consequence, it is thought that any plan which provides a money that, in retail trade, in the settlement of obligations, in the payment of taxes due the Government, and otherwise, will either free the individual from the liability of losses which he has suffered heretofore, or will give him an opportunity for making a gain, however small, will be one that will attract the Chinese people; and in this way it may be said to fit into the habits and customs of the inhabitants, even of those who are uneducated and untrained in business methods.

As has been said one must not underestimate the difficulties which stand in the way of the introduction of any new system; but, on the other hand, in spite of these difficulties and adverse conditions, it is thought it is worth while, both for China and for the people who are doing business in China and with China, that at least a beginning be made toward the introduction of a rational national monetary system. Within the last two or three years many suggestions have been made in this direction. The Chinese Government has issued a decree commanding its board of finance to organize and put into effect such a system. It has instructed its delegate to the Osaka Exposition in Japan to make a study of the Japanese monetary system with reference to obtaining information which might aid the Government in formulating its own plan. The Tientsin and Shanghai chambers of commerce have adopted resolutions looking toward the establishment of a new system. The Hongkong Chamber of Commerce has likewise acted in a somewhat similar direction. Sir Robert Hart has outlined a plan which has been submitted to the Chinese Government. The Chinese Government, in its commercial treaties with England, Japan, and the United States, has agreed to establish a national monetary system. With so much agitation on that subject and with so evident readiness on the part of the Chinese Government to act, it is practically certain that some attempt toward reform will be made. It is in consequence extremely desirable that when a beginning is made it be made in the right direction. It is not to be expected that all the difficulties enumerated can be overcome promptly, nor that a national system which shall be generally employed throughout China can be put into full effect within a short space of time. If a beginning is made in

the right direction there will be nothing to retrace, and the system can be put into effect along right lines with the practical certainty that eventually the end desired will be attained.

3. THE INTRODUCTION OF THE NEW SYSTEM.

It has been thought by a minority of the persons who have discussed with the American Commission their monetary plans that, on account of the fact that the Chinese people are not accustomed to a national monetary system, it would be wiser to begin by introducing a general monetary silver unit, in order that the people might thus become accustomed to the use of a national coin of a recognized weight and fineness, and that the establishment of this coin upon a parity with gold be made a matter for later action after this first step had been taken. It has been the opinion, on the other hand, of the American Commission, and, it may be said, also of the large majority of those with whom the question has been officially discussed, that it would be a wiser plan, because in the end an easier plan, in starting the new system, to establish the new coins, silver and copper, on a gold basis, and from the beginning to maintain them at a parity with gold.

There are various reasons for beginning on the gold parity:

1. The benefit of the system will be more evident from the beginning. While a national silver currency not on a parity with gold would be of great benefit to the internal trade of the country, the export and import trade would be helped directly in no way by such a system. It would receive only indirect benefits, such as the encouragement of internal trade would give to trade with foreign countries. On the other hand, it is extremely desirable that the export and import trade be encouraged as soon as possible, because through that trade will perhaps come one of the chief benefits to China in enabling her to pay off more easily her foreign debts.

It can not properly be urged that the chief or even the first benefit of the new system would go to the foreigners, though, of course, they also will be benefited. The Chinese as the producers of the goods to be exported, and as the consumers of the imports, will gain most. The fluctuations in exchange have checked the foreign demand for Chinese goods. With the increase in that demand prices will naturally rise and a new source of wealth for the Chinese will thus be opened. Again as the risks of a fluctuating exchange have led exporters to pay the lowest possible prices for goods to export, these same risks have led importers to ask the highest possible prices for their imports. The removal of the risk would lead to an increase in the number of importers, to greater competition, and in consequence to lower prices for imports. Though the money may largely pass first through the hands of the foreign trader, the chief and first real benefit will come to the Chinese producer and consumer.

If, for a short time, the new system were adopted only in the seaboard provinces and not yet in the interior, of course there would be a greater rate of exchange between interior and port than now exists for goods not to be exported. As so great a part of the shipments to the ports, however, is for foreign trade, so that the gold rate must now be considered, the real fluctuations in exchange in actual business would probably be less than now. At any rate, the difficulty

would be merely temporary and would be overcome as soon as the system could be extended into the interior, and is slight compared with the great benefit to follow when the system is complete.

2. The establishment of the system on a gold basis would encourage also from the beginning the investment of foreign capital in China, and this again will be a source of profit to the Chinese people and to the Chinese Government, which will enable them to meet their obligations.

The benefit of a new factory or a new railway or other business undertaking is very great to any country. In America it is usual for the people to give not merely land free for such enterprises, but they often give freedom from taxes for a period of years, and at times a large bonus in cash. The new investment gives the employment at higher wages to more workmen, encourages the building of houses, makes a greater demand for food supplies and goods of all kinds, and tends thus to make the whole people more prosperous.

3. The beginning on a silver basis with the expectation that the coins were afterwards to be raised to a parity with gold would tend to encourage speculation to a greater degree than if the new system were established at once on a gold basis. It would tend still further to the unsettling of business, through a fall in the prices of goods when the value of the silver coins was increased; and while it might prove a source of considerable profit to the bankers or to others who might have large stocks of the new silver on hand, it could not but prove detrimental to the individuals who had large obligations to meet, inasmuch as they must be met in a coin of greater value.

4. The Government would derive directly from the gold basis a benefit from an increase in its revenues, inasmuch as it would be expected that comparatively soon, at any rate, all the obligations due the Government would be collected in terms of the new coin, and even though the readjustment were so made that there would be no additional burden laid at first upon the taxpayer, the Government would at any rate be saved from the loss in the value of its revenue which might come from the further depreciation in the price of silver such as it has suffered during the last few years, a loss, as we have seen, of nearly 50 per cent since 1882.

Even though the Chinese Government might need to make a new loan at first to start the new system, the added power to pay taxes, which would soon come, as has been shown, would be so great as to make the real tax burden less than it now is.

5. A somewhat indirect benefit, but one which, beyond question, would be felt in the long run, would be that which would come from improvement in business methods under the influence of the example set by foreign investors as their capital and business increased in the country.

It is believed to be not merely thus more beneficial to China to start on a gold basis, but if the gold basis is the end to be attained, it is easier than to start with silver which must afterwards be placed on a gold basis, because, as soon as the Chinese people perceive that the new coin is practically equal in value to gold and is, in consequence, not subject to the depreciation which they have experienced of late in silver, they will be much more ready to accept it and hold it for regular investment than if it were merely a silver coin still subject to the fluctuations of the metal. Indeed, there is a possibility, although one

that would in no way prove an evil, that the coin might for a considerable time be hoarded by many Chinese as they would hoard gold. If a silver coin were generally circulated throughout China before it were placed on a gold basis, it would not give this confidence. Besides, there would be a considerable danger of the issue being so large that when an effort was made to place it on a gold basis there would result the necessity, as was the case in India, of a relative contraction in the currency as compared with the business demand which would produce the ill effects of falling prices already mentioned. If the coinage were also free, there would be a likelihood of the melting of the coins, of the subsequent recoinage of the metal, and so on, which at present exists and which would render it practically impossible for the Government to have any accurate knowledge as to the amount of coins in circulation; and in consequence the difficulties of regulating and maintaining the system would be vastly increased.

The fact must be recognized also that in any case the new monetary system must work its way slowly throughout China. The mere physical difficulties of coining enough silver to supply the needs of 400,000,000 people or more will make it certain that several years will elapse before there can be a national system of any kind which shall be generally employed throughout China. If, therefore, it is proposed to have a national system thoroughly introduced before it is placed on a gold parity, there must be a delay of many years before even the treaty ports and foreign countries could get the benefit of stable exchange. On the other hand, if the system is introduced on the gold parity, it may, and must in fact, be introduced first in these treaty ports and in other places where exchange with foreign countries is common. These benefits will be secured from the beginning, and then, as the new coins increase in number, they will gradually make their way with the aid of the viceroys through the different provinces into the interior, and the system can doubtless be completed in its final form in substantially the same length of time that it would take to introduce the silver currency throughout the country, even though it were not on the gold basis. The difficulties of the maintenance of the coins at par throughout the country will be discussed later.

The difficulty, then, of the Chinese people becoming accustomed to the use of the new coins would be met as readily under the one plan as under the other by the mere physical impossibility of coining the silver rapidly enough, unless special efforts were made to hire foreign mints to do the work, and the people would become the more readily accustomed to the new system if it were on the gold basis, inasmuch as the benefits to them would be greater.

The opposition of individual bankers and the hostility of local officials, if such were found, can also probably be met by the method employed in the introduction of the system. It would probably be best to begin first in perhaps only part of the treaty ports and larger cities, say in Peking, Tientsin, Shanghai, Hankow, and Canton, and the country adjoining. Owing to the form of government in China, these cities, with the country immediately adjoining, can be considered practically as territorial units, and the system might be started in them as if they were independent territories. Possibly it would be best to begin for a few months in the province of Chili alone, to get the right method worked out there. As soon as a sufficient number of coins were ready to meet a noteworthy part of the monetary needs

of the community, say 25 per cent. they might be introduced, the Government making them receivable at their par value in payment of all public obligations, and even, if it seemed desirable, making the payment of these obligations in the new coins compulsory. Under those circumstances the Government should also provide in those cities a sufficient number of exchange agents of tried probity, so that the native Chinese who had taxes to pay could bring their copper cash or their silver sycees or Mexican dollars to these agents, secure the new coins at fair rates, and then immediately use them in the payment of their obligations due. In this way they would see at once the superior value of the new money in the payment of obligations; they would know that they could always be employed for this purpose, and they would in consequence not hesitate to receive them.

Furthermore, it would doubtless be wise for the Government to employ as exchange agents the European bankers and the native bankers who might be in this way properly compensated for work done for the Government and thus a source of profit might be created which would tend to remove the opposition which they might otherwise make. Indeed, if the Government were itself making a profit from the seigniorage of 10 to 20 per cent, it could well afford, if, for political reasons, it seemed desirable, to pay a rather high commission for this work. Even if they should wish to do so, as has been sometimes said, it would not be possible for the local officials to take an unfair advantage of the exchange of the old money into the new coins, provided the Government started the reform in small territories like the cities indicated and established directly its exchange agents whom it could trust. The terms of the exchange ought to be made so public that it would be comparatively difficult for extortions of the kind indicated to be practiced.

From these cities the system should, of course, be extended as rapidly as possible, considering the necessity of meeting the needs for coins and of securing the proper governmental control, into the adjoining provinces where the people are already accustomed to coin, and where the viceroys and other local officials would be most in favor of the new plan; and then, gradually, it should be extended from province to province into the interior. The people in the coast provinces now accustomed to the use of the Mexican or British dollar, as the experience of Russia in Boukhara, of the English in Hongkong, of the Philippines, of Japan, and of British India shows, would very rapidly learn the use of the new coin whose par value was above its metal value. The people in the interior not accustomed to the use of coin at all would gradually gain that new custom through the possibility of paying their governmental obligations in them at once, and that in such a way that they would be freed from the oppressive charges of the money changers, and would thus be led to see promptly the advantages of the new coins.

While, speaking generally, the European bankers have expressed sympathy with the plan for the adoption of a new monetary system for China, it is recognized that the adoption of a system on the gold standard would, of course, soon lessen their profit from an exchange business. While far-sighted bankers are not likely to place obstacles in the way of such a reform, since, in the long run, the plan would probably prove profitable to them, as well as from the fact that they would at any rate hardly openly oppose such a great economic benefit

to the country as a whole, even though it were somewhat detrimental to their individual interests, it may be worth while to indicate what the effect of such a system would probably be on the business of the foreign bankers. There is every reason to believe that, although there would be loss from a fixed exchange, there would be enough increased business in the nature of loans and discounts to offset this loss. In India it is stated that, although the profits from exchange business have fallen off since the stability of exchange has been practically secured, the bankers have increased quite decidedly their loans. In Japan it is stated by one of the great bankers that since the introduction of the gold standard there their profits have, on the whole, doubled in that country. It is scarcely to be expected that so great a benefit could come to bankers in China on account of the different methods of doing business. Still it is probable that within a few years a considerable increase of gains over losses would be secured. In Mexico some of the largest exchange bankers, whose profits for the last few years from exchange have been very large, are ready to take the risk of their loss because of the certainty of new foreign investments for which they might readily become the agents. Moreover, in the case of foreign investments the banks would naturally become the agents and organizers of business enterprises, etc., to a degree which would bring them large profits. From all these sources, and from others which will readily occur to the banker, the far-sighted banker would be certain that in the long run not only the country as a whole, but also his bank, would gain.

4. NEED OF EXPERT ASSISTANCE.

Inasmuch as China has few, if any, men who have been thoroughly trained in the organization and management of monetary systems on the European or American plan, in order to secure the sound management of any new system, it would seem best that foreign experts be placed in charge of the mints, and be given a general supervision of the monetary system as a whole. Of course, by far the largest part of the work would be done by Chinese, and the foreigners would hold their positions as appointees of the Chinese, Government; but it would be absolutely necessary, in order to secure the requsite skill and confidence in success, that they be given a large measure of discretion in management, at least for the first few years.

In order to avoid as far as possible international jealousy, it would doubtless be wise for the few foreigners who would be needed to organize and manage the system at first to be selected from different nationalities; but it would also doubtless be best for China, as well as for the success of the system, that they be not in any way representatives of their governments. Foreigners appointed should be experts of such standing that they would have the confidence of business men, both Chinese and foreign, and of all the governments. As Chinese appointees they should see to it that the interests of China are fully cared for and protected, and to this end, of course, they should give every degree of publicity to the way in which their work is carried on.

It has even been suggested as a wise plan that the controller of the currency should not merely make monthly reports in detail of the con-

dition of the currency, including amounts in circulation, loans, drafts on foreign credits, and other matters such as are usually published by European governments, but, further, that the Chinese Government should voluntarily open the controller's accounts at reasonable times to inspection by accredited representatives of the powers interested in the indemnity. These accounts would be only those usually published and would not be those of the fiscal system in general, but only those connected with the monetary system. Of course no power would have any right to make such a demand, but inasmuch as the success of the system depends upon public confidence, the Chinese Government could perhaps in no other way so easily and so wisely secure confidence as by voluntarily giving this right of inspection to the powers. China might well also be willing that they should make any suggestions and recommendations regarding the management of the system which they saw fit, although, of course, the foreign experts in charge of the system and the Chinese Government itself should not be placed under the slightest obligation to follow such suggestions.

It is clear, of course, that the monetary system as such should be kept entirely separate from the fiscal system. The income of the State from taxes of various kinds should be kept entirely separate from the income in connection with the seigniorage of the monetary system, and the expenses of the State in every way excepting those in connection with the monetary system would also be kept apart, so that, while the details of the monetary system should be made public, these would in no way give any person information regarding the fiscal system of the country beyond that which would normally be secured in other ways.

It is believed that while a reasonable degree of foreign assistance must be secured by China in order to make the success of the new monetary system secure, it would be very unwise for the foreign governments as such to take any part in the matter or to take any supervision over the system beyond the inspection which might be offered by the Chinese Government itself. The governments would, beyond any question, find it extremely difficult, if not even absolutely impossible, to work in harmony in connection with a matter so important and so complicated as that of a monetary system.

5. OUTLINE OF SYSTEM.

While the details of the management of a monetary system must be determined in part as the system itself develops, the fundamental principles of such a system must, of course, be laid down in advance. Whether the monetary system of China should be begun at once with all the coins on a fixed parity with gold, or whether, as has been recommended by a minority of the commissioners who have discussed the plan of a system, silver coins to circulate at their bullion value, should first be introduced and afterwards be placed on a parity with gold, the opinion is unanimous that when the system is completed all the coins should be maintained at a parity with gold. In such a system there must be adopted by the Chinese Government a standard unit of value. This should consist of a fixed number of grains of gold of a fixed degree of fineness, so that its nature can not be questioned. How large this standard unit should be, is a matter to be determined in the interests of China herself. The chief purpose of

establishing a gold unit as a standard is to facilitate trade, and that largely with foreign countries. In consequence the unit should be of such a nature that it will render the keeping of accounts in trade matters as simple as possible. If the different nations with which China trades had the same unit, it would probably be wise for China to adopt that unit. Inasmuch, however, as the monetary units of Great Britain, France, the United States, Russia, Japan, and Germany are all different, there is no one which would give absolute harmony. The next point of union with these monetary systems seems to be for China to adopt as a unit one that is somewhat closely related in value to the American 50 cents, the English 2 shillings, the Japanese yen, the Russian rouble, the French 2½ francs, and the German 2 marks. If China is to adopt any one of these, it would seem natural that she should choose one of a country with which her relations are close and with which her trade is large and increasing.

Many nations, however, in order to emphasize their own separate sovereignty, in part, and, in part, in order to check the circulation of foreign coins of equal weight in their own country, have thought it desirable to establish their monetary unit at a weight slightly different from that of other countries. The countries of the Latin Union of course form an exception to this rule. If China were to adopt a similar plan, she might, while adopting a unit not exactly the same as any of those suggested, still select one that is nearly allied to the values already suggested, so that in ordinary retail dealings there would be convenience of reckoning. In the larger transactions, owing to exchange conditions, there must always be slight fluctuations in rates of exchange with gold, a circumstance which makes somewhat complex bookkeeping, so that a slight variation of the unit from any of the standards mentioned would be of relatively slight importance.

It is not at all necessary that this standard gold unit of value be coined at all. It might be uncoined, like the Japanese one-yen piece or there might be no coinage whatever of either this unit or any of its multiples, as is the case, for example, in the Philippines with their standard gold peso. So long as the unit is legally fixed and so long as the Government will maintain the minor coins at a parity with this quantity of gold, it is not essential that the coins be provided.

It is probably desirable, however, that, while primarily China should maintain as its chief circulating medium silver and copper coins at parity with gold, there should be also some coinage of gold. It is possible that in the course of time the price of silver might rise so that there would be the possibility of the silver coins becoming more valuable than the gold. Under those circumstances a check would be given to this tendency if provision were made for the free coinage of suitable pieces of gold, presumably multiples of the standard unit, five, ten, and twenty, such coins to be furnished on demand either with or without a reasonable coinage charge. Under ordinary circumstances, of course, there would be no demand whatever for these coins, inasmuch as silver would be more acceptable to the people, more in accordance with the conditions of the country, and more profitable to the Government. It might be well, however, eventually, in order to secure the effect on the feelings of the people which an occasional use of gold coins might give, for the Government to coin some

gold on governmental account, and from time to time and as suitable occassion offers to pay out some of these coins in the meeting of Government obligations.

Owing to the economic condition of China, it is of course desirable that the chief money of circulation be composed of silver and copper. In a country where wages are often not more than seven or eight dollars a month in American money, and where they are sometimes not more than from two to five dollars a month, and where, naturally, the standard of living must be on the same scale, it is evident that there would be very little use for gold coins among the Chinese people. The one kind of coin that is really current pretty generally throughout China is the copper cash. This may be said to be the coin that has been developed to meet the needs of the people in their daily intercourse. In larger transactions they may use silver by weight, or, in some places, in coins. When one reflects that these copper coins, which have been developed to meet business conditions, are worth each in the neighborhood of one-twentieth of an American cent, one realizes how minute the transactions may be. The current coins, then, must be silver or copper. The coin which shall represent the unit of value of course will be silver, although it will have a fixed gold value. These silver coins which should be maintained at par with the gold unit, should be given, of course, an appropriate device suitable to China, and should, presumably, for convenience, be about the size of the Mexican dollar.

It has been urged by some that a better coin would contain about the quantity of silver contained in the Haikwan tael, which is nearly one-half larger than the Mexican dollar. Inasmuch as the Chinese are accustomed to reckoning in taels in most sections of the country, it would doubtless be a convenient unit so far as the customs of the people are concerned. The chief objection, naturally, is that the coin is too large for convenient use. It would be generally agreed that the Mexican dollar is about as large a coin as can be most conveniently handled in ordinary business dealings. There is no special reason why one name should be given to this coin rather than another, and it might equally well be called tael as dollar. Of course whatever name were given to the unit, its relative value to the Haikwan tael and to the Mexican dollar would be fixed by law. The value would be determined somewhat arbitrarily by the gold unit which was adopted, but it is desirable that the bullion value of the coin be somewhat, perhaps 10 or 15 per cent, less than the parity value. Besides this silver coin, which shall have the name of the standard gold unit and which shall be the chief monetary unit in circulation, there should be coined, of course, subsidiary and minor coins of suitable weight and value, presumably halves, quarters, fifths, tenths, twentieths, fiftieths, and hundredths of the monetary unit, at least, and in all probability coins of still less value, perhaps even as small as a thousandth part of the unit. Probably it would be well to have the larger minor silver coins proportional in weight to the standard, although as they are less in value the danger of counterfeiting or of melting would not be so great provided they were made even a little lighter. The minor coins of the lower denominations, made of nickel and copper, might be made of such a value as metal as to yield a large profit as seigniorage to the Government.

6. MAINTENANCE OF PARITY WITH GOLD.

Perhaps the most difficult, as well as the most important, question in connection with the new monetary system is that of maintaining the parity of these silver, nickel, and copper coins with gold. According to the best reports that can be secured, during the last twenty years the silver coins have fallen in their relations to gold some 50 per cent. The copper coins have likewise depreciated, although to a much less degree, the estimate being about 32 or 33 per cent.

In practically all civilized countries the fractional coins of copper and nickel are maintained at a parity with the monetary unit only by the limitation of their coinage and their acceptance by the Government. They are usually of a very light weight as compared with their value, so that there is no temptation to melt them down. Their value being small, it would ordinarily not pay anyone to counterfeit them, as the profit would be very small unless expensive machinery were employed, and this would be likely to lead to detection. It is comparatively easy for the Government, by noting business conditions and meeting requests from business men and bankers, to supply the needs of the country for these coins reasonably well without special danger of overissue so that the coins would depreciate in value.

The conditions, however, are quite different regarding the silver coins, especially those of the larger denominations. These naturally, in a country like China, become the means of making payments in all larger transactions, and are used not merely as a medium of exchange, as are fractional coins, but to a very much greater extent than the small coins that are used, especially in countries like India and China, as a means of storing values for a considerable length of time when exchanges are not demanded. Inasmuch also as these silver coins represent the unit, and should probably be made legal tender for unlimited amounts, while fractional coins are made legal tender for only very small amounts, they will come to represent in the minds of the people the standard by which values are measured more than will any of the other coins. The methods to be adopted are, of course, in part the same, but further steps may also need to be taken.

The principal measures to be recommended are the following:

1. The amount of coinage should be strictly limited and kept entirely within governmental control. In the case of the fractional coins, it has been said that this measure alone is sufficient to maintain the parity. It is probable, likewise, that in the case of the larger silver coins a strict limitation of the quantity issued to the proper demands of business would be, on the whole, the most efficient and the most important of the means for maintaining the parity. There is in every country a certain amount of money work to be done by each class of money. There are a certain number of payments to be made in effecting exchanges. Some payments are for small amounts, which demand a supply of copper cash. All the larger transactions will demand either the unit coin or multiples of the unit for their payment, although, of course, a great saving of the metal coins is made by the use of bank notes, checks, bills of exchange, book accounts, and other common devices. If the amount of coins issued should be at all beyond the business needs of the country, so that there is not a constant and steady demand for practically every coin in circulation,

there will be a tendency for the value to depreciate, until eventually, if the supply increases, the value will fall until it reaches the value of the bullion contained in the coin. A strict limitation, then, of the supply by the Government to the needs of business is to be considered the first and most important method of maintaining the parity.

2. As the value of the coin is to be determined by the relations of the demand to the supply, it is of almost equal consequence that the Government itself establish a normal steady demand, and by its own readiness to receive the coins for payments due to the Government manifest openly and indisputably its confidence in the value of the coin. The second measure to be employed, then, is that the Government agree to accept the coins at their full parity value in payment of all obligations due to it. How large a demand this may create as compared with the demands of private business will vary, of course, largely in each separate country. It is probably true that in many countries the demand of the government in the course of the year equals 25 per cent of the entire amount required to satisfy the needs of business. In some countries even, where business is comparatively slack and where the system of barter is somewhat extensive, the proportion might be much larger, whereas in other countries it might well be less. Even this demand, however, is seen to be so large that this method, in connection with the first, would, in most countries where the people had confidence in the integrity of the government, be sufficient to maintain the parity of the coins with gold without any further steps.

3. It is usual, however, to make the silver coins, especially in countries where silver coins are the ones most common in circulation, legal tender in the payment of private as well as of public debts. The small subsidiary coins would naturally be legal tender for only a small amount, say $10; the silver unit, however, would be legal tender for any amount. This still more, of course, strengthens the sources of demand which tend to maintain the value.

4. The further means which is usually advocated, and by many believed to be the only sure means of maintaining the parity, is that the Government agree to redeem the silver coins by the payment of gold, practically on demand. With certain important qualifications this general statement may be accepted. It is not, however, necessary that the redemption always be made on the spot and in gold coins. The method of redemption will, of necessity, depend upon the business customs of the country in question.

In a country like China, where the ordinary medium of circulation is silver, there is no business need whatever for gold money, to be used within the country itself. If gold is required for purposes of manufacturing jewelry or other similar needs, this is not a question which concerns the monetary system or, generally, the needs of business. Jewelers needing gold for any such purpose should supply their own wants as much as the manufacturers of steel tools should provide their raw materials without depending on the Government. The legitimate business demand in connection with the currency which calls for gold is a demand only for the purpose of making payments abroad in a gold-standard country. For this purpose not gold within the country itself is needed, but rather a gold credit in the country or countries in which the payment must be made. If a

merchant in Shanghai, with a gold obligation to be met in London, comes to a bank for the means of paying his debt, he does not wish gold to ship; he wishes, rather, an order for the payment of gold in London. For the satisfaction of all proper business needs, therefore, in connection with the monetary system, it would be sufficient on all occasions if the Chinese Government were to keep a gold credit in Europe against which it could sell bills of exchange whenever a legitimate demand came from business men for this purpose. This is practically the plan that has been followed by Holland for the past thirty years, and it is the plan which, at length, British India, after several years of effort in that direction, has adopted. In Holland, for example, the national bank, which acts as the Government agent in the regulation of the currency, does not agree to pay out gold on demand to all who present silver or bank notes. The silver gulden in Holland is not redeemable in gold. On the other hand, the Government has for many years declared itself ready to give gold in exchange for silver gulden or other money of the country, provided that gold were needed for the purpose of paying obligations due abroad. This qualified redemption alone, a redemption which is comparatively seldom called for, taken together with the Government control of coinage and the high credit of the Dutch Government, has been sufficient to maintain the parity of the silver coins during a long period of years, even in times of commercial pressure.

In order to maintain the parity, however, it is not necessary that the Government hold itself ready to meet all demands for gold for export purposes or for the payment of foreign obligations. Without endangering the parity of the coins in all internal transactions and without in any way injuring the business of the country, it would be sufficient if the Chinese Government were to put its gold reserve at the service of business men, not in the first instance at any time that the demand is made (why should the Government enter into competition with the banks?), but only after the banks and other financiers had been unable to meet the ordinary demands for gold payments abroad, as would be shown by the increase in the rates charged, in the local money, for foreign bills of exchange.

Whenever it becomes necessary for a country to meet the obligations which it owes abroad, it is usual for those obligations in the last resort to be met by the goods that on the whole can be shipped the cheapest. If there is a large supply of money in a country whose credit is unquestioned, it may well be that the gold supply in that country will be so large that it will be cheaper to ship gold abroad to settle balances due than to force down the prices of some other product in order to make that the most available commodity for shipment. Whether the money metal in a country is the one commodity that can most readily be spared to meet the balance of payments due will depend to a considerable extent upon the quantity of money in circulation as compared with the needs of business. If money is really scarce in the country and is a metal money, it is probable that its value will be so great in terms of goods; that is, in other words, the price of goods in terms of money will be so low that the goods will be shipped abroad rather than the money itself. If, on the other hand, either through the slackness of trade or through an excessive coinage, the supply of gold money becomes large in comparison with the demand for its use

within the country, prices of goods rise, the rate of interest falls, people can more readily get gold than goods, the rates of exchange in terms of the local money rise, and money is more readily shipped for the payment of obligations or for investment. If a money which is not gold, but silver or paper, is used, and becomes excessive, prices of gold bills of exchange in terms of the silver or paper money will rise as do the prices of other goods, and gold will be exported.

In a country like China, therefore, it would be sufficient if the Government were to announce that it would, under ordinary circumstances, expect the bankers and other business men to supply the needs of those who require gold or silver for the payment of obligations abroad, and that it would meet such demands only when, owing to the strong demand, the rates for gold had risen considerably above the normal. If the Government would agree that whenever the rates of exchange on Europe reached a high price above the parity it would sell bills of exchange against its gold reserve in Europe for silver coins or other equivalent paid in, it would find its reserve called upon only when the silver currency had become for the time being redundant, either on account of the slackened demands brought about by lessened trade or on account of excessive coinage. If, for example, the usual banking rate on London were about one of the new coins for 2 shillings, the Government might sell exchange if the rate rose to 1.02 for 2 shillings. If, when money were paid in, in exchange for the foreign bills of exchange, that money were not reissued, but were held in the treasury, a scarcity of currency would thus be brought about which would soon make it more profitable to ship other goods to meet obligations rather than to take from the channels of trade the money which had thus acquired an added value.

When, on the other hand, owing to a stoppage in the coinage or to an increase in the demands for the coins from an increase in business, they became relatively scarce, it might well be that business men would find it advisable to pay gold either into the treasury of the Chinese Government at home, or more likely to the agents of the Chinese Government in Europe or America, and to receive in return those silver coins in China to meet their obligations there, or to use them for the purchase of goods in the interior. By this means we should obtain in China a currency which would be elastic so as to meet the fluctuating demands of trade, and at the same time the Government would find itself free from all obligations except those imposed upon it by unusual circumstances which rarely come. (Cf. p. 37.)

If the gold reserve were maintained, especially for the purpose of maintaining the parity, as indicated above, and if, under ordinary circumstances, the banks were to meet the usual commercial needs, it would seem that the reserve fund need not be especially burdensome in quantity. In India, with its circulation in round numbers of perhaps 1,800,000,000 rupees, or £120,000,000, it has been found that a gold reserve of considerably less than £10,000,000, or 8⅓ per cent of the monetary circulation, is ample to meet all the needs of business for gold export purposes. Even if, for a considerable period of time, imports of goods were considerably larger than exports, so that the tendency would be toward a strong demand for gold for export, it is scarcely conceivable that a contraction of the currency of, say, 18 or

20 per cent would not be sufficient to overcome this tendency and force the prices of some other goods so low that they would be substituted instead of gold as a means for meeting foreign obligations.

Owing likewise to the unlikelihood of a gold reserve held abroad for such purposes being frequently called upon, it would doubtless be comparatively easy for any country desiring to maintain such a reserve to secure on relatively easy terms gold credits against which it could draw to large amounts if necessary. Such obligations, of course, could not be unlimited as regards quantity, but they might be ample; they could not be unlimited perhaps as regards time, but could be renewable; and as soon as a comparatively short experience of a few years had shown the wisdom of the management of the system in China, both the need of such a reserve and the difficulty of securing it would be very much lessened.

There seems no reason to doubt that by the means indicated the parity of silver coins in China can be maintained absolutely, so far as all local transactions are concerned. The fact that a rate of exchange should be charged for bills sold on a gold reserve placed in foreign countries would not affect the local conditions, even though at times that rate should be quite high.

If, however, for the sake of argument, we should grant that under the pressure of abnormal conditions the parity might temporarily fall by a small amount, 1 or 2 per cent, even then conditions would be vastly better than they have been for the last few years, or than they could be even with a uniform silver coin whose value fluctuated with the value of the metal. This is another reason to be kept in mind why under any circumstances a determined effort should be made to place the new silver coins on a parity with gold from the beginning and maintain them there.

7. THE ESTABLISHMENT OF A GOLD RESERVE.

It is extremely desirable, in order to maintain the confidence of business men in the new monetary system, that practically at the beginning of the work provision be made for the accumulation of a gold reserve which will be sufficient at all times to maintain the parity of the new coins beyond question. How may this gold reserve be accumulated?

1. If the price of silver were to remain about where it is at present, and the gold unit were made substantially equal in value to the one recommended, that is, to the American 50 cents, the English 2 shillings, the Japanese yen, the Russian rouble, etc., there would be a profit from seigniorage of some eight to twelve per cent on silver coins. As regards the minor coins, especially those of copper and nickel, the seigniorage profit would be very much larger. Beyond question practically all of this seigniorage should be used from the beginning for the purchase of gold to be used as a reserve.

2. It has already been suggested that the nations interested in the war indemnity might well afford to make some concessions to China provided she were to establish a new monetary system which would give a fixed par to exchange in business dealings. If they were to make the concession which has been proposed, i. e., the acceptance from China for a period of years of their shares in the indemnity on

a silver basis, reserving the right to call for a difference between that and payments on a gold basis at a later period, a considerable saving would be made for China so long as the price of silver does not go materially above its present rate. It would seem entirely proper for the governments, if such a concession were made, to insist upon it that this saving be used directly for the establishment of a new monetary system, in good part at least for the establishment of a gold reserve.

3. In all probability, however, if the plan is carried through promptly for the most important parts of China, it will be desirable for China to make a loan of considerable size. To that end it will be necessary, of course, for the Government to pledge specific revenues. Either new sources must be found which can be devoted to this end, or some of the present revenues must become more productive. Persons most familiar with the financial situation of China are of the opinion that a more rigid, businesslike management of present sources of revenue would result in a considerable increase, and are also of the opinion that it is by no means impossible to find new sources of revenue which will prove sufficiently productive. It is thought that the people are not taxed to any very burdensome extent, and there is reason to believe that a loan raised for this purpose would soon result in so great an increase in the prosperity of the country that its burden would not be felt at all, as was the case with the loan of Egypt a few years ago which so improved the irrigation system.

It should be borne in mind also that a gold reserve secured thus by a loan would be kept on deposit in Europe and America, and would doubtless be seldom drawn against. The interest that would thus be paid to China on current balances would very materially reduce the expense of the loan.

Furthermore, inasmuch as the loan is not to be employed for ordinary uses, but is only to be drawn against on uncommon occasions, it would suffice, if, instead of a very large gold loan, part of the sum necessary should be simply in the form of a gold credit which might be drawn upon. This gold credit, which would be merely a right to draw for a specific maximum sum, a right which would seldom, if ever, be used, could probably be secured at a comparatively slight expense, provided there were reasonable confidence in the management of the monetary system.

4. After the reserve had once been established in Europe and America, provisions should be made for its replenishment in case of drafts being made upon it, by an agreement of the controller of the currency in China to honor silver drafts drawn against the Chinese Government by its agents abroad in exchange for gold deposited in the fund. The rates should, of course, be fixed by the conditions at the time, and to the controller should be given discretion, within certain limits, at least, in fixing the rate. In this way a crisis of even a considerable length could beyond doubt be safely tided over, provided the system itself in China were managed intelligently and firmly.

The Government might also, following the example of Japan, buy in China gold bills of exchange on Europe and later collect the gold there for its reserve.

5. If the Chinese Government could open and work some of the gold mines which the country is said to contain, it is quite possible that within a few years a good supply could be secured from this source.

8. BANK NOTES.

As soon as practicable, if not even from the very beginning, some provision should be made for the issue of bank-notes payable in the new currency, to be issued and managed in accordance with conservative banking principles. A proper bank-note system, whether issued by a single bank or a system of banks, under proper organization and control, would give the needed elasticity to the system, by which the amount of currency would practically automatically increase and decrease in accordance with the needs of business.

Such a system would do very much to protect the gold reserve. At a time of an increase in the demand for money, either for moving the crops or other temporary purposes, unless there were some bank-note system established there would be naturally a large issue of the new silver coins. When this extraordinary demand fell off the silver coins might easily be to a considerable extent excessive, and thus the rate of exchange would naturally rise and the coins would be paid in for bills of exchange drawn against the gold reserve. If, on the other hand, a proper bank-note system were established, the increased demands for money would be met by the increased issue of notes, and a shrinkage in the demand would result in the paying in of these notes, and in the consequent reduction of the monetary circulation without danger of a corresponding demand upon the gold reserve.

In the next place the bank-note system would take its part in the supply of the monetary needs of the country at a less cost than would the otherwise larger coinage of silver; always provided, of course, that the bank-note system is established on sound principles.

Of a nature somewhat different is another advantage which, nevertheless, ought not to be overlooked—that is, the advantage which would come from interesting bankers in the monetary system of the Government, and getting their counsel and support in the proper management of the system.

It is the opinion of many of the best authorities that a proper bank-note system could be best secured through the establishment of one imperial bank, which should have the monopoly of bank-note issue, as is the case in Japan, France, and elsewhere. Such a bank, if established, would naturally become the chief fiscal agent of the Government in connection with its loans and its general financial administration.

Of course the minor points in the establishment of a monetary system for any country, such as the amount of coin that is to be issued before the system is put into effect, the exact time for the introduction of the system, the rapidity of its extension, the places in which the gold reserve or gold credit shall be kept, the size of the loan necessary, etc., must be settled on the spot by persons who are intrusted with the onerous duties of putting the system into effect and of its administration. It is possible and proper in this place only to indi-

cate in a few lines the nature of the system and the general principles on which it can be and ought to be established.

9. WORK ALREADY DONE.

It was felt by the Commission on International Exchange that the first essential step in giving to the Chinese Empire a sound currency was to present the subject to the leading powers having commercial and financial interests in the Orient, with the object of bringing into a clear light the advantages of the proposed measure, demonstrating to those powers the impartial motives of the United States, and securing their approval of the general project and of the initiative of the American Government.

While many other steps will be required before the gold standard can be in actual operation throughout the length and breadth of the Chinese Empire, it was felt that the one step absolutely vital to the inauguration of the system was that approval of the principle should be first secured. In this fundamental matter the American Commission has been completely successful. Approval of the principle of a national gold-currency system for China has been given by Great Britain, France, the Netherlands, Germany, Japan, and Russia, with a completeness which has removed the first great obstacle to bringing the monetary system of the Chinese Empire into harmony with that of other commercial States.

The representatives of all of the powers consulted, as has already been stated, accepted in a general way as desirable and practicable the suggestions made by the Commission of the United States. The character of these approvals warrants the statement that the work of the Commission up to this time has been entirely successful. Differences of opinion in regard to details were naturally encountered at different capitals, but they were overcome in many cases by mutual discussion and comparison of views. The form in which the ultimate opinions of the commissions were expressed also differed. In Great Britain and Germany there was an agreement upon certain principles, which was signed mutually by the representatives of the countries engaged in the conference. The views of the delegates of the Netherlands and of France were expressed in reports discussing at considerable length the points submitted by the American and Mexican commissions and expressing judgment upon them. In Russia a formal statement of views was prepared by the Russian commissioners, which was not mutually signed, but was transmitted by the Russian commission to the Mexican and American commissions as a formal expression of the views of the Russian Government. In Japan likewise the representatives of Japan expressed their unanimous conclusions in a series of statements which were in practical accord with the American position.

Upon the soundness of the general proposition laid down by the Mexican and American commissions, that the adoption of a gold-exchange standard in the present silver-using countries would greatly contribute to their economic progress, there was universal agreement at every European capital where the subject was presented. There was agreement upon the principle that such a system must involve the continued large use of silver coins, in order to conform to long-estab-

lished customs and existing scales of value, but that free coinage of silver should be suspended and the determination of the quantity of the coins taken under the control of the State, in order that measures might be promptly taken to give them a fixed relation with gold.

Upon the subject of the introduction of a uniform gold-standard system into China there was unanimous agreement that such a system would be desirable and advantageous, both to China and to the gold-standard countries which have large commercial dealings with her. Upon the question, however, whether the gold standard should be established at the beginning or should come after the introduction of a uniform national currency upon the silver basis, there was some difference of opinion. The British resolutions declared that the national currency of China should consist of silver coins made full legal tender throughout the Empire and that "as soon as practicable steps should be taken for the establishment in China of a fixed relation between the silver unit and gold." It was explained that if it were possible as a practicable matter to start with the silver coins on a gold basis that plan would be best. It was, however, not thought practicable. The Russian resolutions recited some of the difficulties of beginning upon a gold basis and declared that the American plan "would have our approval if it were so amended as to mean a national silver currency issued on Government account, which should be given as soon as practicable a fixed parity with gold." This is practically the same as the English expression, except that it favors coinage only on Government account. The report of the Netherlands Commission strongly favored a gold parity from the beginning and declared this to be the only practicable method of obtaining the benefits of a fixed exchange; but it was pointed out that care and intelligence would be required in the administration of such a system. The German resolutions declared against free coinage of the silver coins and asserted that the Chinese Government should "take at the beginning of the reform all those steps which would allow her an influence on the rate of foreign exchange." The French report also favored the system suggested by the commissions of Mexico and the United States. The Japanese report looks forward to a gold system in the future, after the model of that of Japan, but declares that "in view of the present condition of China, it is too much to expect that the currency reform can be started at once on a perfect system; and as it is considered highly disadvantageous to delay the said reform on that account, it is advisable to adopt the suggestions of the American Commission as a matter of expediency." They add that "the utmost skill and care are needed to overcome the great difficulties which necessarily accompany the operation of the system."

Thus, upon the part of six powers—Germany, France, the Netherlands, Mexico, Japan, and the United States—there was agreement that the best method was to begin the issue of the new currency at a fixed parity with gold, while upon the part of Great Britain and Russia there was a disposition to favor beginning on a silver basis, with the view of first supplying the country with a uniform currency and then giving it within a short interval a fixed gold value.

Upon the subject of adopting the relatively uniform ratio of about 32 to 1 in the currency systems to be estabished in the Orient by those

countries and dependencies which are considering a change in their existing systems, there was agreement in all countries except Russia. In Russia the wisdom of a ratio which would prevent the exportation of the coins by the rise in the price of silver was admitted, but it was deemed best to make the reservation that each country should determine its own ratio according to its monetary needs and economic conditions. Even in Russia, however, indorsement was given to the ratio of 32 to 1 for China as corresponding to actual economic conditions.

Upon the proposal that there would be advantages in making the purchases of silver actually required by each government for its coinage purposes with as much regularity as possible, there was agreement at each capital where the subject was considered, except in France, where objection was made to the adoption of any definite official policy on the subject. Doubt was expressed in some cases as to whether actual requirements could always be determined with regularity, but the principle was declared to be sound, that regularity of purchases would be beneficial alike to the silver market and the stability of international exchange.

Still another subject was dealt with by the French and German commissions without solicitation by the Commission of the United States. This was the internal tax levied upon manufactured articles of silver. The French tax upon such articles is high, amounting to about 30 per cent of the value of the silver at its present price, and imposes serious restrictions upon the use of such articles in France. It was suggested by the French delegates themselves, therefore, that the abolition or reduction of this tax would be advantageous and that they would recommend it to their Government. A similar declaration was made by the German commission. The text of the resolutions and reports adopted in each country will be found in an appendix to the complete report of the Commission.

The German resolutions recited the fundamental principle, embodied in the original notes of China and Mexico addressed to the United States, that it was not sought to affect a change in the monetary system of the gold-standard countries, and that the establishment of international bimetallism was "neither intended nor considered practicable." This declaration, it is needless to say, had the cordial approval of the Mexican and American commissions.

10. THE CONTINUANCE OF THE WORK.

The securing of the formal approval of the representatives of the leading European powers and of Japan to the principle of the prompt establishment of a uniform monetary system for China, placed on a gold basis, either at once or at the earliest practicable moment, marks the first necessary step, though only one step, toward the accomplishment of the work of the Commission, as indicated in the notes of Mexico and China in presenting the subject to the Government of the United States.

A project of law is already in course of preparation in Mexico which contemplates the adoption of the gold-exchange standard, and which will probably be enacted at the present session of the Mexican Congress.

Owing to the conditions in China, which have already been discussed, the adoption of a sound monetary system in that country is a much more difficult matter. At the suggestion of representatives of the Chinese Government one member of the American Commission is in China to present formally to the Imperial Government the results of the work accomplished in Europe by the Mexican and American commissions. The United States is already in a position to state that no obstacle will be placed in China's way by any of the European powers, or by Japan, and that in many ways she may count on their hearty cooperation.

The commissioner will be glad to cooperate with the Chinese Government in formulating the details of a suitable gold-exchange system and in presenting the matter to native and foreign business men and officials and in urging it wherever such work can be of assistance.

The notes of the governments of Mexico and China contemplated also the extension of the fixed exchange system in some practicable form to the other silver-using countries of the world. Peru has already taken action of her own volition, and the Straits Settlements with the Federated Malay States and French Indo-China have taken first steps toward securing this fixed parity of exchange. When China succeeds in carrying out her plans the English colony of Hongkong and the German colony of Kiao Chau will doubtless employ either the system adopted by China or one closely related to it. With the new system successfully inaugurated in the near future in Mexico and in preparation by China, the path will be opened for the presentation of the project by the American Commission to the friendly republics of Latin America, and for widening the opportunities there for the extension of American trade.

The work has been begun successfully, even beyond the anticipations formed by the Commission at the outset. The study of the subject has brought into clear light the great difficulties of the task, but it has made still more evident the great benefits that are to come, both to the silver countries and to Europe and the United States, from the success of the movement when it is finally assured.

The friendly petition of China to the United States has been a natural result of the cordial relations between the two powers growing out of the enlightened attitude of our Government, and has afforded the means of demonstrating anew the desire of the United States to promote the true economic interests of China, in the belief that those interests are identical with those of America and of all other powers seeking legitimate commercial opportunities in the Orient.

V. THE BALANCE OF TRADE AS A FACTOR IN THE ESTABLISHMENT OF A GOLD EXCHANGE STANDARD.

1. In their discussions on the establishment of a gold-exchange standard in the Straits Settlements, China, Siam, and elsewhere, a number of bankers and other business men have expressed the opinion that the balance of trade of those colonies is a most important factor in the question. It has even been stated that it would probably be impossible for China to establish such a monetary system on account of the asserted—not fully established—fact that the balance of trade is

heavily against her. It seems, therefore, of consequence that this question be examined with some care before active steps are taken for the establishment of a new system in any silver-standard country.

2. From the days when the mercantilist doctrine in political economy was dominant, business men have spoken of a favorable and of an unfavorable balance of trade. The balance is considered favorable when the exports of commodities for a time apparently exceed in value the imports of commodities, and the balance of trade is considered unfavorable when the conditions are the opposite. The reason for these expressions primarily was the fact that silver and gold were considered commodities of peculiar importance to the prosperity of a country. The importation of the precious metals was looked upon under all circumstances as a decided benefit and their export as a more or less severe misfortune. Of course, the truth of the matter is that in some way in the long run the value of the exports all told of a country must balance the imports; or, at least, generally speaking, they must pay interest on foreign capital invested in the form of imports; otherwise, people would be either importing goods for which they were not compelled to pay, or they would be exporting goods for which they were to receive no pay. This state of affairs, it is needless to say, does not exist. It may be that some of the exports or of the imports will be either gold or silver, or for a time credit may take the place of goods; but in international trade gold or silver bars are ordinarily used; or, if coins are used, they too are employed simply as commodities. Whether gold or silver shall be exported depends in fact ultimately upon the question whether it is cheaper for the country concerned to sell silver or gold rather than to sell commodities of some other class. No one, of course, would deny the fact that, under certain conditions of trade, gold and silver as the commodities on which our monetary and banking systems are based are commodities of very exceptional importance in the business of a country, as powder and lead or possibly horses are in time of war; and under special circumstances a country frequently does pay unusual rates for the sake of securing these commodities at those times. These extraordinary demands for money are usually due either to conditions which diminish credit, or to special need of cash for special purposes. The last need is ordinarily easily met by a good banking system; the first often in part by a sound money system in which people have confidence.

3. The statistics of exports and imports of commodities are ordinarily used in discussions as an indication of the real balance of trade. This will, of course, give an apparent balance, though often not the real one. For many years, for example, England's imports of commodities have been far greater than her exports, so that apparently the balance of trade has been decidedly against her. One reason for this apparent discrepancy has been that England, as a creditor country, with money invested in enormous sums abroad, has had due to her people the interest or profit on these investments, so that this interest has been used abroad to pay for many of the goods imported. Likewise English ships have been to a great extent the freight carriers of the world, and the freights paid by foreigners to shipowners have been used to pay for the goods imported. These two prominent factors have, of course, been supplemented by some others, so that a condition which has been spoken of as an unfavorable balance of trade

has, in itself, under ordinary circumstances, made no extraordinary demand for export of gold from England.

In practically every new country in process of development investments are made by citizens of the wealthier countries. During the period of this investment, machinery, equipments for railroads, building materials, and supplies of various kinds are sent into the new country to be used in production there. The foreigners who thus place this capital in the new country do not expect that capital to be returned, at any rate for a long period of years. In many countries such investments become permanent. The only return that is then demanded is the interest or the profits on these investments, and even they in many cases are re-invested, so that there is no demand for exports to offset the imports thus made.

Here, again, an apparent balance of trade against the country may mean simply that capital is being invested in that country, and that the investments are making little, if any, demand for the export of gold or silver, or even for the export of other commodities. It should then be kept in mind that the ordinary statistics regarding exports and imports may be very deceptive, and that, at any rate in the long run, a country can not continue buying goods unless she is in some way or other making provision for payment for those goods or for the use of the capital which they represent. These payments may at times be made in gold or silver; but the precious metals, and especially coined moneys, will not be so used unless under all the circumstances of the case it is cheaper to send them than to send other commodities. Should money become scarce in the country, the result, of course, is that it becomes dear, or to express the same thing differently, that the rates of interest or discount rise. This tends, if other things remain equal, to diminish the value of commodities in relation to money; prices of commodities fall, and thus it pays better to export other commodities, and if the process continues, to import gold.

Of course the fact is recognized that the demand for gold may for a time be very strong and the rates high. In consequence, if a government attempts to supply gold or gold exchange, it must be prepared to supply large sums on short notice; but such demand can not last long with high rates and a contracting currency. (See also pp. 35 et seq. for means of securing gold.)

4. These general principles may now be briefly applied to the question of the establishment of a gold-exchange standard. If silver coins in a country are to be raised above the value of the bullion contained in them, in order that they may pass at par with gold, in some way they must be made equally available with gold so far as their serviceableness for doing the money work of the country under consideration is concerned. There are various ways in which these silver coins may be given a value above that of the bullion contained in them:

(*a*) There is a certain amount of money work to be done in a country. If, by limitation of coinage, the coins are kept relatively scarce as compared with the work to be done, they will acquire the added value that is ordinarily given to any commodity when the demand for it is great and the supply relatively limited.

(*b*) The Government under consideration may also agree to receive these silver coins in payment of obligations due to the Government at

the same rate at which it will receive gold coins which legally represent the same value, thus creating a strong and constant demand.

(*c*) The silver coins may likewise be made legal tender for private debts, which will tend to increase the demand for them.

Neither of the above methods would be affected by the balance of trade. They do not call for gold.

(*d*) The Government may agree under certain circumstances to redeem the silver coins with gold. This redemption may be carried out in various ways. Gold coins might be given directly for silver coins on demand either at par or at a certain fixed charge. In this case the Government might need to keep gold, and a temporary adverse balance of trade would cause high rates to be paid for gold if it were needed. A government can, of course, arrange to buy gold, if necessary, as Japan and Russia in fact did in many cases when they were establishing their new systems. But in such a country as China, for example, where silver is the current coin, gold would be demanded in actual life for only two purposes: First, for use in the arts. In that case gold might be bought by the goldsmiths as bullion wherever they wished, and they should pay for it accordingly. There is no reason why the Government should attempt to supply coins or bullion for any such purpose. Second, those persons who have debts payable in gold standard countries might wish to buy foreign bills of exchange in order to pay those debts.

The Government might then, for all purposes of business, keep a gold reserve in Europe and America against which it could sell bills of exchange in return for the new silver coins paid into the treasury. It has long been the custom of Holland, through its national bank, in this way to protect the parity of its silver coins while still maintaining its gold reserve. Ever since the establishment of its present system Holland has consistently refused to pay out gold on demand in exchange for its silver coins. Whenever gold is demanded the inquiry is specifically made and examined, whether the gold is needed for export. If so, it is regularly granted; if not, it is regularly refused. Of course the Bank of Holland has it in its power to control to a considerable extent the rate which will be charged for exchange on foreign countries, although in the main, naturally, that is controlled by the commercial situation; and the Bank of Holland, it is understood, will give gold in exchange for silver for export purposes without itself demanding the right of selling a foreign bill.

The Chinese Government, if it wished to enter into the banking business, either through a national bank or directly, might in this way enter into competition with the banks in China by selling bills of exchange against a gold reserve in Europe and America at the current rates of exchange of the day. It is not, however, necessary, in order to protect the parity of its silver coins, that the Chinese Government should directly enter the banking business, and it probably would not be wise for it to do so. On all ordinary occasions it might be well to permit this business to be done by the banks already established. If, however, for any reason there came a tendency toward the depreciation of the silver coins, so that the exchange rates became abnormally unfavorable, the Government might then sell in large sums to either the banks or to private individuals bills of exchange

against its foreign gold reserve. It will be seen that if it adopts this policy, the silver coins would be paid in only when there was a tendency for them to depreciate, either because they had become redundant through an overissue or through a decided slackening of the demands for local business. Such coins would regularly be worth much more in their own country than in any other country and they would never be shipped out. If, as soon as they were paid in for bills of exchange, they were locked up in the treasury, the scarcity thus caused would comparatively soon make them more valuable for the local trade than for the purchase of bills of exchange, and then demands on the foreign gold reserve would cease. The balance abroad would be met by the shipping of other less-needed commodities and the currency would be protected. An adverse balance of trade, it is thus seen, would not affect the monetary system in the long run so long as its coins were not over-issued or did not for some reason become redundant, and would then affect it only so long as the surplus was being automatically retired.

5. According to the best available statistics the following appears regarding China's balance of trade:

Synopsis of China's foreign trade, 1890 to 1901 (from customs statistics).

[Value in haikwan taels and sterling.]

Year.	Merchandise.		Gold.		Silver.		Aggregate net.		Sterling.	
	Imports (value at moment of landing).	Exports (value at moment of shipment).	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Official value of haikwan tael.	
	Haikwan taels.	*Haikwan taels.*	*Haikwan taels.*	*Haikwan taels.*	*Haikwan taels.*	*Haikwan taels.*	*Haikwan taels.*	*Haikwan taels.*		
1890	109,547,087	100,199,682		1,783,228		3,557,772	4,006,405		5.2¼	£1,041,537
1891	115,023,051	115,553,640		3,693,246		3,131,886		7,355,721	4.11	*1,809,507*
1892	116,786,112	117,218,438		7,332,000		4,825,000		12,589,326	4.4¼	*2,744,473*
1893	129,241,804	131,951,558		7,459,000	10,804,000		635,246		3.11¼	125,143
1894	139,569,201	144,690,042		12,744,000	26,389,400		8,524,559		3.2¾	1,363,930
1895	150,244,490	160,696,753		6,624,000	36,685,000		19,608,737		3.3¼	3,196,224
1896	177,630,606	146,929,091		8,114,000	1,720,000		24,307,515		3.4	4,035,048
1897	177,915,163	181,769,995		8,511,700	1,641,500			10,725,032	2.11¾	*1,598,080*
1898	184,486,528	177,165,384		7,703,843	4,722,025		4,339,326		2.10¾	624,863
1899	233,953,853	217,610,004		7,639,779	1,271,444		9,975,514		3.0¼	1,506,303
1900	185,870,551	176,680,221	1,202,315		15,442,212		25,834,857		3.1¼	4,004,403
1901	237,871,600	187,954,894		6,635,313		6,097,802	37,183,591		2.11 9/16	5,503,171
	1,958,140,046	1,858,419,702	1,202,315	78,240,109	98,675,581	17,612,460	134,415,750	30,670,079		[e]21,400,672
	1,858,419,702			1,202,315	17,612,460		30,670,079			
	[a]99,720,314			[b]77,037,794	[c]81,063,121		[d]103,745,671			
Deduct balance of exports										*6,152,010*
Total net adverse trade balance										15,248,662

[a] Net balance imports made. [b] Net export gold. [c] Net import silver. [d] Aggregate balance imports merchandise and treasure. [e] Total of balance of imports.

Speaking generally, for the past decade or more there has been a considerable exportation of gold from China, since gold has not been needed in the country, the monetary demands being supplied entirely by silver and copper. Silver, on the other hand, as the money metal in steady demand with no sufficient production, has usually been imported. But the figures given show a steady, and on the whole a steadily increasing, excess of aggregate imports, including gold and silver. This must, of course, have been covered in some way. Possibly there have been exports of considerable moment overland, so that they have not been noted in the customs. Probably large investments have been made of foreign capital for which no exports in return have been demanded. In fact, for several years the imports of machinery, manufactures of iron, etc., which are probably largely of this nature, amount to some five or six million taels annually. The years 1900–1901 show how exceptional conditions make themselves at once felt, but nowhere is there anything to show that any principles different from those indicated have been at work.

To sum the matter up:

6. If a silver-standard country, China, for example, should establish a silver currency which it attempts to maintain at a parity with gold, giving to its coins a value above their bullion rate, it is not probable that there would be any serious difficulty in maintaining that parity in the long run, on account of exchange conditions. In China there is at the present time a large amount of silver in various forms which, even in China itself, passes substantially as bullion. Should this prove to be a cheap commodity to send abroad, there would surely be no objection. If a new system were established, with silver coins above their bullion value, and there should be a very large coinage, so that there was a tendency for the silver coins to fall below the gold parity, the standard rates would at once rise in terms of the local currency; i. e., one would be compelled to pay more of the Chinese currency for a pound sterling than before. Those people who had gold debts to pay abroad would find that they must pay higher rates in these silver coins, because they had really become cheaper than their nominal value. If the Government would sell gold exchange to meet all demands at some fixed rate more unfavorable than the usual banking rate, it would receive these coins when that point was reached and sell the exchange, and the bank rate could, in consequence, not rise above the governmental rate. For example, if the usual banking rate in the new coins were about one standard coin for 2 shillings, and if the Government agreed to sell exchange on London to any amount whenever the rate reached 1.02 for 2 shillings, exchange could never rise above that point. If, as they were paid in, the coins were retained in the vaults by the Government or by banks acting as agents for the Government, and were not reissued, a relative scarcity of them would soon be created, so that they would return to their legal gold value, and then this special demand on the gold reserve would at once cease. There would, under circumstances of this kind, be no danger of their going out of the country to so great an extent as seriously to hamper business. In fact, as China would be the only country in which they would be worth more than their bullion value, they would not be exported at all, unless they fell to their bullion value.

It is not expected, of course, that there would be retained in China for business purposes any gold worth consideration. The banks would under ordinary circumstances find themselves able to meet demands for gold exchange at ordinary business rates, the same as is done at the present time. If, for any reason, there came an undue pressure so that their rates became very unfavorable, the Government might then properly, in order to prevent any depreciation of its standard, itself offer to sell gold exchange at rates considered worse than those ordinarily charged by the banks. This would under all circumstances prevent any depreciation below such charge. For this purpose the Government would of necessity keep a gold credit abroad. Inasmuch, however, as gold deposited in Europe or America would draw interest, or a gold credit which was not likely to be drawn upon could be obtained at a very low rate, the expense need not be great; and, inasmuch as the gold reserve would thus be called upon only under extraordinary circumstances, the country on its gold-exchange system would find its business handled in substantially the same way as is the case in any country on the gold standard.

Incidentally, too, it will be seen, such a method of procedure would make but a small demand upon the gold supply of Europe, so that no serious apprehension on that score need be felt.

If the above considerations hold, a so-called adverse balance of trade, like that of China, need prove of slight importance as a hindrance to the introduction of a gold-exchange system if proper measures be adopted.

II. CONSIDERATIONS ON A NEW MONETARY SYSTEM FOR CHINA.[a]

By JEREMIAH W. JENKS, *Commissioner in China.*

I. INTRODUCTION.

1. PURPOSE OF THE PAMPHLET.

Several months ago the Commission on International Exchange published at Shanghai a pamphlet, Memoranda on a New Monetary System for China, prepared by Mr. Jenks. In that pamphlet were given the reasons why the United States Government had appointed the Commission on International Exchange, a very brief outline of the plan which was suggested for the consideration of the Chinese Government, together with some arguments regarding the plan, and a brief statement of the work which the Commission had done in Europe and elsewhere. It has been found that owing to the brevity of the pamphlet several parts of it were misunderstood, especially by

[a] A translation into Chinese of the first pamphlet, made by Mr. Sao-ke Alfred Sze, one of the secretaries of the Commission on International Exchange, was published at the same time. This pamphlet will also be published in Chinese through the courtesy of their Excellencies Lü Hai-Hwan and Sheng Hsüan-Huai, treaty commissioners of China. The translations into Chinese have been made for the most part by Mr. Sze. Chapters X, XII, XIII, XVI, were translated by Mr. E. T. Williams, Chinese secretary of the American legation at Peking.

Chinese officials and business men, and very many inquiries have been made for a more detailed discussion of many of the points therein raised.

As a representative of the American Commission on International Exchange the writer of that pamphlet has spent several months in investigating the currency question in China with the aid of very many officials and business men in the different parts of the Empire, and in discussing the outlines of some practicable plan for a new monetary system especially with the members of the Monetary Commission appointed by the Imperial Government. It is the purpose of this pamphlet to elucidate many of the points touched upon in the first pamphlet by printing, with here and there slight corrections and elaborations, a series of papers handed to the Chinese monetary commission to form the basis of discussions with them. It is thought that by so doing a much more definite view than was presented in the earlier pamphlet may be obtained of the plan which it had seemed to the Commission on International Exchange wise to submit to the Chinese Government for its consideration. This method will, of course, involve considerable repetition and will destroy the unity of the discussion. On the other hand, it will emphasize the points which have been made most prominent in the discussions.

2. TWO PLANS SUGGESTED.

It will be noticed in the following memoranda that a rather sharp contrast is drawn between two possible plans of procedure on the part of the Chinese Government—(*a*) the establishment of a new uniform monetary system, consisting of silver and copper and possibly nickel coins, on the silver basis, the question of the establishment of these coins at a fixed value with gold being a matter left for future consideration, with the definite idea, nevertheless, that the ultimate aim of the Government is the establishment of the system on a gold basis; (*b*) the establishment of a monetary system consisting of silver, nickel, and copper coins which would be issued by the Chinese Government at a fixed value in terms of gold and maintained at that value thereafter.

Very many of the persons who had earlier been giving advice to the Chinese Government and who had been writing on the subject of monetary reform in China had recommended the first system, believing that the establishment of a uniform silver currency was a useful, if not even a necessary, preliminary first step toward the establishment of a monetary system on the gold basis, and the example of India was cited as a case in point. It was the belief of the American Commission, after making a detailed study of the question, even before its representative went to China, that it would be much easier for China to follow the second plan and to establish its coins at a fixed value with gold from the beginning, as the United States has done so successfully within the last year in the Philippine Islands. The American representative found, on taking the matter up for discussion with the Chinese Government, that this Government, very naturally, not having had, as yet, opportunity of studying the subject thoroughly, and very properly desiring to proceed gradually on so important a matter, had practically adopted the views of those who thought it was best first to establish a uniform

silver currency without reference to its gold value. In consequence a considerable part of the energies of the commissioner were devoted to the discussion of this question. It is a pleasure to record that the views of the American Commission seem finally to have met the approval of a goodly number of the Chinese officials as well as of several of the English writers and business men who, naturally looking first at the example of India, had advocated, some of them in print, beginning on the silver basis. Several of these men have now said that a further study of the question has convinced them that the plan suggested by the American Commission will be the easier for China and the wiser plan for her to follow. There is good reason to believe that further consideration of the subject in detail in the light of the experience of the Philippines and of the changed conditions of the silver market during the last few years would lead substantially all to this conclusion.

It is difficult to follow the course of reasoning of some who say that it is impossible to put a monetary system on a gold basis until you have a system complete. The gold value attaches to each of the coins. It is immaterial logically whether that value is given to them when they are issued or later. Practically, as will appear in the following pages, it is much simpler and more profitable to give them the gold value one at a time as they are issued than to give it to them all at once when millions are already in circulation with a well-known silver value.

3. PROCESS OF ESTABLISHING A MONETARY SYSTEM.

So much has been said regarding the "gradual" establishment of a monetary system in China and of taking one step at a time that it seems worth while in this introduction to consider briefly the nature of the process of the establishment of a monetary system, in order to show how misleading the figure of speech of "going forward step by step" has been. The subject will be made clearer, of course, in the detailed discussions which follow.

A monetary system made up of copper, subsidiary silver, standard silver and gold coins—to omit representative money, like bank notes—is a single, complete, organized whole which must be built up gradually. The building of this structure is not like going on a journey, in which one can take one step forward, then another step forward, and another until the journey's end is reached. If it were so, one should begin first by taking the step which will lead to the copper coinage, and one should completely establish the new copper coinage throughout the country until the people became used to that. The next step should then be taken leading to the subsidiary silver coinage, which is of less pure silver than the standard coins. One should then pause until the copper coins have been given a fixed value in terms of the subsidiary silver. One should then take the next step forward to the introduction of the standard silver coins, and should then wait until the subsidiary silver and copper coins have been given a fixed value in terms of the standard silver coins. Finally, one should proceed to the fourth step of introducing gold either in the form of coins or in the form of a gold reserve which can be used as a standard. The country must then wait until the standard silver, the subsidiary silver, and the copper coins are given a fixed

value in terms of gold. The journey would then be complete. When one analyzes this process, including the silver and copper, it is seen that the idea is absurd. Nevertheless, it is equally absurd to begin with silver and afterwards go to gold as it would be to begin with copper alone, proceed to subsidiary silver, and then to standard silver. The process in both cases is identical.

The establishment of a complete monetary system is rather like building a house with four sides, one wall of which is represented by the copper coinage, a second wall by the subsidiary silver coins, a third wall by the standard silver coins, and the fourth by the gold. The structure must be built up gradually, but it is wise to build the four sides up together, so that the relations between them will be the same from the beginning, and that, as the building rises, there will be no disturbance in their relations one to the other. In the plan which has been proposed twenty years is allowed for this period of building the structure. The cost has been estimated in detail for the first five years. The cost in succeeding years would be relatively less and would need no special provision. The system would pay for itself after the first five years. But the completion of the monetary system is planned to take twenty years, surely a long enough time, and the process is a gradual one.

The plan of beginning on a silver basis to change to a gold basis later is like building up three walls of the house together, omitting the fourth wall. It will take practically as many years to build the three walls as it would to build the four. After the twenty years are completed, unless some specific provision has been made for the accumulation of a gold reserve, it may take many years longer before that is accumulated. When the Government begins to establish the gold standard—that is, to build the fourth wall of the building which has been left out—all of the arrangements of the house, which have been made heretofore with reference to having one side open to the air, must be altered to suit the new conditions, with the result that—to drop the figure—there will be a complete upsetting and disarrangement of the business relations of the country. In other words, the whole system of prices, which has been adjusted to the silver standard, must be upset and readjusted to the gold standard. That process of readjustment will continue several years at best. In consequence, if the Government adopts the silver plan, it is simply postponing indefinitely giving to China a good monetary system, and it is increasing vastly the difficulties, as is explained in detail later.

In the plan which the American Commission has proposed, in five or six years there will be enough of the new money in circulation so that prices in all the treaty ports and in all international traffic will be adjusted to the new gold standard, so far as the people have any desire so to adjust them. The gradual extension of the system into the interior as the new coins increase in number will involve no new disturbances. The change from a standard of prices fixed on bullion silver to those fixed on a standard dollar with a gold value is not appreciably more difficult than the change from prices on the bullion standard to those on a dollar standard on the silver basis. There must be at least one disturbance of prices; it will be much less on the whole if it is taken directly from the beginning, and it will

save completely the trouble and expense of a second readjustment from the standard silver dollars to gold after the one from bullion to standard silver dollars has been made. To begin with the silver plan with a gold standard only for the indefinite future is like setting up an engine to run imperfectly for years without the governor, with the idea that this can be attached later. The engine should have all its essential parts when it begins to run.

4. OUTLINE OF THE AMERICAN PLAN.

It is perhaps wise to indicate in outline at the beginning the main points of the plan which has been advocated by the American Commission in order that the papers that follow may take their places as a more detailed explanation of a system already outlined. The following is therefore submitted:

(*a*) The Chinese Government to assume supervision or control of the various provincial mints, so that the entire coinage system of the Empire will be managed in harmony.

(*b*) The establishment of one uniform system of imperial coins, consisting of silver coins, nickel coins, and copper coins, which shall be uniform throughout the Empire, and in due time a legal tender for all obligations, public and private; the minting of all other coins to be stopped.

(*c*) These silver, nickel, and copper coins to be established on a decimal system and to be maintained at proportionate values one to the other.

(*d*) A gold unit consisting of a fixed number of grams or decigrams of gold to be established as the basis of the currency. The silver and copper coins to be issued at fixed values proportional to this unit, and to be maintained thereafter at this fixed gold value. It is understood that gold will not be used in general circulation within the country itself, although a small amount may be coined, but that the currency shall be the silver and copper coins above mentioned and bank notes based upon them.

(*e*) The establishment of a gold reserve sufficient to maintain these coins at the fixed gold value, but not necessarily to furnish a gold circulation for the country itself.

(*f*) The Chinese Government to manage this system in accordance with the principles established elsewhere by successful experience; and, therefore, in order to secure the necessary confidence of Chinese and foreign business men, to employ to assist in the establishment of the system foreign expert advisers of the highest standing whose reputation and work will secure confidence.

(*g*) The establishment of a national bank, of subordinate treasury agencies, and of other means that may be recommended by the experts and that may prove essential for the successful carrying out of the system.

II. UNIFORMITY OF COINAGE.

Action will need to be taken by the Government covering the following points:

1. Declaring that there is to be established a uniform system of coinage, arranged on the decimal plan, and that the coins will in due

time be made legal tender throughout the Empire for the payment of public and private debts.

2. The central Government assumes charge of all mints; this action to take effect as soon as compensation is determined.

3. The provinces, on agreement with the viceroys and governors concerned, are to receive due compensation for all the mints surrendered to the central Government; this compensation presumably to be in the form of a certain amount paid each year for a fixed number of years, or a remission of taxes of a fixed amount for the same period.

4. All coinage of present coins by the different mints to be stopped immediately, unless it should be decided to adopt into the system the 10 cash pieces and to continue their coinage temporarily. That would probably not be wise.

5. Expert appraisers, presumably three, two from the mints now in existence in China, and the third to be hired presumably from abroad, to be appointed to appraise the value of the mints on the basis of their normal output as a basis for agreement with the viceroys. This output to be gauged in part by what they have been doing in the past, but especially by the fair normal capacity of the mints themselves.

6. These same appraisers to make detailed recommendations as to the mints that can be used most profitably in the future, as to those which should be closed absolutely, and as to the transfers of mint machinery or the purchases of new machinery that should be made.

7. Detailed reports of all coins of all denominations heretofore issued by each one of the mints to be secured from the various viceroys and governors concerned.

8. The best estimate possible to be secured of the money now in use—(*a*) coins of silver, (*b*) silver bullion, sycee, (*c*) gold of whatever form, (*d*) cash of whatever form, cents, etc.

9. Regulations to be made regarding the denominations of the various new coins, with their exact weights in silver, nickel, and copper, the amount and quality of the alloy, etc.

III. METHODS OF FIXING VALUES OF SUBSIDIARY AND MINOR COINS.

1. BUSINESS FIXES VALUE.

The business men will ultimately fix the values at which the people will take the coins, since the people use the coins in buying and selling with the merchants, bankers, etc., who in such matters are more influential and powerful than the common people; but

2. GOVERNMENT MAY DETERMINE BUSINESS ACTS.

The Government can make such arrangements regarding coinage and the receipt and issue of coins that the business men and people will find it to their advantage to accept and use the Government valuations:

(*a*) Make Subsidiary and Minor Coins Less Valuable as Bullion.

Let subsidiary and minor coins, both silver and copper, never be proportionately more valuable as bullion than are the large coins; usually they may be much less valuable.

(b) LIMIT QUANTITY.

So far as is practicable suit the quantity of coins issued to business needs. At first this can not be measured accurately; later, experience will show the right amounts.

(c) ALWAYS RECEIVE COINS AT FACE VALUE.

Let the Government always receive coins at their face value in the payment of taxes. For this purpose the quantities of subsidiary silver to be received at any one payment might be limited to sums of not over, say, \$20 for 50-cent pieces, and to, say, \$10 for 20-cent and 10-cent pieces. Quantities of copper to be received at one payment may be limited to, say, \$5 for 20 and 10 cash pieces; to \$1 for smaller pieces.

(d) INTERCHANGE SMALL COINS FOR LARGE AND VICE VERSA.

Let the Government at its established agencies keep a good supply of all kinds of coins, and exchange them free of charge one for the other for all applicants in reasonable amounts (say as above in receiving taxes), dollars for subsidiary silver, nickel, or copper coins, and vice versa.

(e) MAKE COINS LEGAL TENDER.

Ultimately, when the value is firmly established at the Government rate, let decrees be issued making it legal for every debtor to pay his debts in whichever coins he chooses within the limits set in (c).

3. IF ABOVE PLAN FOLLOWED ESPECIALLY

(d) VALUE WILL BE MAINTAINED.

If there are plenty of places where these exchanges can be made, no one will give eleven 10-cent pieces for a dollar when at the Government office he can always get a dollar for ten of them.

IV. ADVANTAGES OF A FIXED GOLD VALUE FOR THE CHINESE CURRENCY.

In the imperial edicts of April 22, September 7, 26, and 29, 1903, the encouragement of commerce and industry was emphatically announced as the present policy of the Government, and the board of commerce was established in order to carry out that policy. Perhaps in no other single way can this purpose be accomplished so promptly and surely as by the establishment of a monetary system which has a fixed value with gold. It is worth while to note the following benefits which would come therefrom:

1. A FIXED RATE OF EXCHANGE.

It removes the fluctations in exchange. This makes business much more secure, and takes away from it the gambling element. During the year 1903 the Shanghai tael varied in average monthly value from 2s. 1¾d. in March to 2s. 7d. in October, a variation of 5¼d. Often there are strong fluctuations in one day with no cause that can be foreseen.

In Japan there used to be similar fluctuations, but they have practically entirely ceased. For example, some two years and a half after the fixing of the rate of exchange the fluctuations of the yen were only between 2s. 0.1250d. and 2s. 0.8125d.; that is to say, less than seven-tenths of a penny in two and a half years. This practically eliminates all business risk from this source.

(a) Effect on Prices in Foreign Trade.

It should be noted also that this removal of risk from business will have a tendency, on the one hand, toward increasing the prices paid by foreigners for Chinese goods for export, and, on the other hand, toward lessening the prices for goods imported into China from foreign countries for the use of the Chinese people. With the risk eliminated, the competition of merchants, both importers and exporters, will lead them to take less average profits than now.

(b) Effect on Internal Trade.

These advantages of stability in foreign trade will be reflected also to a greater or less extent in domestic trade, while the favorable effects upon prices will be felt in all parts of the country to a noteworthy extent in the internal trade. The chief curse to internal trade now is the variety of taels and fluctuations in internal exchange. While a uniform silver currency would to a great extent cure this evil, it can never be permanently cured until the silver currency is given a gold basis. A change from a uniform silver to a gold basis after a few years would produce a business upheaval worse than a present change from a variety of taels to a uniform silver currency which has a fixed gold value. No especial difficulty will be felt now in introducing a new currency on either a gold or a silver basis. It will seem but one more added to many existing standards. When there is once uniformity, a change of basis with a complete upsetting of established prices means a crisis.

(c) Effect on Quantity of Exports and Imports.

This removal of risk from business will tend also to increase decidedly both the import and export trade of China. After Russia had established her system on a gold basis her foreign trade increased very decidedly, and a similar result was shown in Japan. Count Matsukata, the Japanese finance minister under whom the change was made, says that on account of the freedom from fluctuations in the value of coinage and also in prices, commercial and industrial enterprises came to make a healthy and orderly development, while trade with the gold-standard countries, which comprises the largest part of Japan's foreign trade, for the same reason, was also making a very healthy growth. Even as regards the trade with the silver countries, where people had feared that, on account of the change, the country might be at a disadvantage, there was a considerable increase in the foreign trade. It was his opinion that trade would, on the whole, be benefited.

The statistics of Japan seem to show that the change to the gold standard does not itself increase imports, on the whole, more than it

increases exports, as some people argue. On account of the large speculative business in Japan at the time of the payment of the Chinese indemnity, during the year preceding the establishment of the gold system and for two years thereafter there was a very decided increase in the imports as compared with the exports, but since that time there has been a decided decrease, so that in 1899 and 1901, for example, the imports exceeded exports by only a very slight amount, in 1900 there being again an increase. The figures seem to show that the relative quantity of the imports as compared with the exports are due mainly to other factors and practically not at all to the quality of the currency. The figures regarding the excess of imports and exports relatively from 1894 to 1901, inclusive, are as follows:

TABLE I.[a]

	Yen.
Excess of imports, 1894	4,235,869
Excess of exports, 1895	6,851,600
Excess of imports:	
1896	53,831,714
1897	56,165,694
1898	111,748,404
1899	5,472,032
1900	82,831,852
1901	3,467,102

The law establishing the new gold system was passed in March, 1897. It went into operation September 30, 1897, but it was not fully in effect until July, 1898. The great excess of imports, therefore, is as much during the period of silver coinage as of gold, and there was a great fall the year after the establishment of the new system, the excess of imports almost disappearing.

2. COINAGE PROFIT.

Giving to the Chinese coins a fixed value in gold would give to China a very large profit from the coinage. At the present prices of silver and copper the profit on each dollar coined, on the average, may be conservatively estimated at 20 per cent. During the last year the profits in the Philippines have been over 19 per cent, and the touch of the subsidiary silver coins there has been higher than would be necessary for China. Probably, also, the amount of copper coins, on which the profit is much greater than on the silver, would be larger in China than in the Philippines. The vice-minister of finance in Japan, Mr. Sakatani, has estimated that China might count on an average profit of 30 per cent. Estimating the profit at only 20 per cent on a probable output of 250 million dollars of her new coins within the first four or five years, China's gain would be 50 million dollars. This should be made to form a very large proportion of a gold reserve.

Moreover, if every effort were made to keep all of the coins at a fixed value one with the other, it would be possible to issue the subsidiary coins at a lower touch than if they were to have their value fixed by ordinary custom among the merchants. Whether the coins are given a fixed gold value or not, effort should be made (and the methods are not at all difficult) to keep up the value of the subsidiary coins to their face value, but if the coins were given a fixed gold value this would be absolutely essential and would certainly be done.

[a] The Fourth Financial and Economical Annual of Japan, 1904, p. 67.

3. INCREASE OF INVESTMENTS.

Fixing the value of the coins in terms of gold would, beyond question, increase such investments of a conservative nature, both foreign and native, as the Chinese Government would wish. Count Matsukata, in referring to the result of the reform of the currency in Japan, said that the tendency had already promptly set in to invest in that country, at low rates of interest, capital from gold-standard foreign countries, thus supplying the lack of capital in the country and giving a powerful stimulus to the development of industry. This was seen within two years after the establishment of the system.

Statements were likewise made to the representatives of the Mexican Government by leading financiers in New York that they had money ready to the amount of at least 50 million dollars gold, in specific cases which they mentioned, to invest immediately in Mexico as soon as the fixed value for the Mexican coins should have been established. Doubtless this sum would have been very largely increased. China might well expect much greater results, owing to the much greater opportunities for investment here and to the larger extent of her undeveloped resources.

Unless there are political considerations which lead to investments, money will be offered much more freely for building railroads, opening mines, and making public improvements of all kinds if China has a sound monetary system on a gold basis. The conservative business men of the industrial nations will gladly invest when they can make certain calculations. Before then we may expect investments rather from speculators or from those who have some political schemes to further. After railroads are built and trade on a large scale in the interior is established, a sound coined money on a stable basis will be a necessity. Trade can not grow satisfactorily under present currency conditions.

4. STRENGTHENED CREDIT.

Probably no other action on the part of the Chinese Government would strengthen its credit among foreign nations so much as the establishment of a sound monetary system which would fix the value of its money in terms of gold. This would enable her to borrow money much more cheaply than at present, and quite possibly to refund some of her foreign debts at lower rates of interest.

The experience of Japan, as stated by Count Matsukata, was this: Within three years after the system was established, he says, "It may be regarded as a happy omen that the Government was able to raise recently a foreign loan of £10,000,000 in London at 4 per cent interest." He ascribed this result to the improved credit of the country, due to the establishment of the new system. If China could refund her debts which now bear interest above 4 per cent at that rate, it would effect a saving, if we assume the tael to be worth only 2s. 6d., of 3,136,400 taels a year. That alone would more than pay the interest on all the loan she would probably need to make to establish the new system with an ample gold reserve, if she desired to adopt a system with a loan.

5. CERTAINTY REGARDING TAXES.

Beside the possibility of refunding her debts, if the price of silver should continue to decline, China could pay off her present debts much more easily with her currency given a fixed gold value. During the past fifteen years the decline in the value of silver has lessened the income of China, as compared with what it would have been on a gold basis, by nearly one-half, the average value of the tael in 1890 being 5s. $2\frac{1}{4}$d., and during the year 1903 2s. $7\frac{3}{8}$d., while it has been at times even considerably lower. As soon as the new monetary system is established, there will be no further decline in the value of the taxes collected; and even if silver should not decline further, there would be a decided advantage to the Government in being able to reckon accurately on the value of the taxes collected for the purpose of paying foreign obligations.

The chief danger to China in her relations with foreign countries comes from considerations of a financial nature. If she at any time fails to pay her obligations, the danger of aggression will be very great indeed. On the other hand, in no other way can she so strengthen her military force or her resources in other directions which would be available for defense against aggression as by improving her financial situation. In no other way can her financial situation be improved so rapidly as by establishing a monetary system which will have the full confidence of Chinese business men as well as of foreigners, and such a system can never be satisfactory to either Chinese or foreigners until the coins have a fixed value in terms of gold. It is clearly within the power of China to establish such a system in the immediate future by taking energetic measures.

V. REASONS FOR ADOPTING A GOLD VALUE FOR THE SILVER COINS AT THE BEGINNING OF THE SYSTEM.

1. GOVERNMENT PROFIT.

The Government will gain a profit from coinage of some 15 per cent more than would be possible if the system were introduced on the silver basis. On the gold basis the average profit should be at least 20 per cent; on the silver basis, possibly 5 per cent. Unless this profit is made when the coins are first introduced, it can never be made afterwards. This additional gain should amount to a yearly profit of $6,000,000 or thereabouts throughout the introduction of the system, say ten to twenty years. It would be increased or lessened in proportion to the rapidity of coinage and in part to the price of silver. It would last as long as the new coinage continued to be introduced. Can the Chinese Government in its present financial situation afford to neglect this source of profit?

2. NO DISTURBANCE OF BUSINESS.

If the coins are introduced at their gold value while business is being done with so many other kinds of coins and with bullion, there will be no appreciable disturbance of business. Prices are now fixed in so many different kinds of moneys that an addition of one kind more would not be noticeably detrimental. It would be only like introducing a new kind of tael.

3. IF INTRODUCED AT SILVER VALUE DISTURBANCE WILL FOLLOW.

If the coins are first introduced at their silver value and an attempt is later made to give them a gold value, the result is almost sure to be a great disturbance of business over a period of several years.

(a) Result of Fall in Price of Silver—Case of India.

If it were certain that the value of silver bullion would continue to fall, so that the Government could simply fix the gold value of the new coins at the silver value of the day when the Government starts on the gold value, and that the silver bullion value of the coins would then continue to decline, there would be no serious disturbance of business. Both Japan and India were extremely fortunate in fixing their gold values under such circumstances. At that time, however, not only was silver bullion steadily falling in the world market, but it was known that the stoppage of the free coinage of silver in India would certainly cause a fall in silver bullion, so that India might safely count on that result, inasmuch as its action would lessen for the time being the demand for silver by some ten or twelve million ounces yearly.

At present, however, in China the situation is entirely different. No act of China's is likely to have any effect toward lowering the price of silver, and even if its action were to have that effect, this would take place immediately upon the introduction of the new system, so that the gold value should be fixed then rather than later. In the second place, the condition of the silver market for the last two or three years has been such that one may anticipate a rise in silver as fully as probable as a fall. There is practically no increase of output; there is a large increase in demand; there is a large increase in the output of gold. There are certain to be fluctuations.

(b) Result of Rise in Price of Silver.

If the price of silver does not fall, the Government must ultimately fix the gold value of its silver coins at considerably above their bullion value—say 15 per cent, at least. If it should fix the rate at, say, only 5 per cent above, any slight rise in the market value of silver would be sufficient to lead to the melting or exportation of the silver coins. A slight fall would again lead to their coinage, and so on, making the system very unstable. We must not forget that in 1903, which was by no means a bad year, the average monthly rate of exchange in Shanghai varied as much as 20 per cent.

China might and should make arrangements so that a permanent rise of any extent in the value of silver bullion, which should lead to the melting of the silver coins, would bring about the introduction of gold coins; but, on the other hand, it is doubtless better, considering business conditions in China, that silver coins be the chief medium of exchange rather than gold, although the value should be fixed in gold. A large bulk of the business of China is on so small a scale that gold coins, which would not be convenient in sizes worth less than $5, are not adapted to the needs of the people. On this account, Mexico for its own use, the United States for the Philippines, England for India and the Straits Settlements, and France for French Indo-China, are

providing systems with silver coins to which they have given or expect to give a gold value, rather than real gold systems with gold in circulation.

The country needs small change, at any rate, even though it should have gold coins. The Government, therefore, if it takes any risk of having its silver dollars melted down, should keep the half dollars, 20-cent pieces, and 10-cent pieces more nearly free from that danger by making them eight-tenths fine, while the dollar pieces are nine-tenths fine.

(c) Result of Raising Value of Coins after Circulation Established.

If the Government fixes the gold value at, say, 15 per cent above the bullion value after the silver coins are once in general circulation, there must be a great disturbance of business. The only way (short of an artificial scarcity, which will seriously injure business and which it would be extremely difficult to enforce in China) to give the coins that higher gold value is for the Government, after they are in circulation and after it has been receiving them at a certain fixed rate, to say that it will receive them at a higher rate and for it to be prepared to sell gold exchange at this higher rate. For example, if to-day a silver dollar is worth 48 cents gold (American) the Government must say that it will receive it for, say, the next two months at 50 cents gold, for the two months thereafter at 52 cents, and so on, until it has reached the required value. If, now, it should increase the rate at all rapidly, the result would be that the banks and wealthy people would hoard great sums of money in order to secure these higher rates. There would be a great scarcity of coins and business would be seriously hampered. Wealthy people who could thus hoard would make large profits at the expense of prosperity in trade.

If the Government, to prevent this speculation, should raise the rate gradually, at, say, not over 5 per cent a year, bringing it up slowly month by month, it would extend the period of unsettled business, of changing and gradually lowering prices, etc., over several years, which might well produce a serious commercial crisis.

A failure on the part of the Chinese Government to begin on the gold system now means, therefore, that it is taking, first, an absolutely certain loss of many millions of dollars to begin with, and, second, a very serious danger of a future hampering of business for several years, and, at any rate, it must take a much more complicated process in the future in reaching a gold system than it need take if it starts now on a fixed gold basis.

VI. METHODS OF MAINTAINING THE SILVER AND COPPER COINS AT A FIXED VALUE WITH GOLD.

1. GOVERNMENTAL CONTROL OF COINAGE.

The Government must absolutely control the coinage and must limit the quantity of coins to the actual needs of business.

It is impossible to keep the value of silver coins above their bullion value unless the Government itself keeps rigid control of the mints. Private individuals must neither be allowed to coin by themselves, nor must they be allowed to determine in any way the quantity which

the Government shall coin or to determine individually the amount of money in use. In consequence, besides the Government control of the mints, it is desirable, and will ultimately be necessary, that the Government be able to stop the importation of foreign coins and bullion, except on Government account, or that by other measures, such as taxation, it make it more disadvantageous to use them than to use the new Government coins.

This limitation and control is absolutely necessary for the following reasons:

(a) Value Depends upon Quantity.

The value of coins, as well as of goods of all kinds, depends, to a considerable extent, upon the quantity of them which are available for use in proportion to the demand for them, just as flour or cloth becomes more expensive when the quantity is scarce and decreases in value when there is a surplus on hand. So the coins, by being fewer in number than the merchants might readily make use of, will acquire an added value, while, if the merchants were allowed to coin them freely, there might easily come to be an oversupply, so their value would fall to the value of the silver bullion which they contain.

In establishing a fixed gold value for the silver coins in India, the government depended for some years upon scarcity alone. Before 1893 the mints had been open to the free coinage of silver. On the 26th of June of that year the mints were closed, and for some years no more were coined. At first the value of the coins declined, there being a large supply in circulation; but after a time, inasmuch as the quantity was limited and no further coins were supplied, there came a strong demand for more to supply the growing needs of business. Then the value of those in circulation began gradually to increase until it reached the price which had been fixed by the Government—1 shilling and 4 pence to the rupee. When this point was reached, and there came a further demand from the merchants, they were ready to pay gold to the Government in order to have the Government, for their convenience, coin more rupees at that price—1 shilling and 4 pence. It must not be forgotten, however, that the scarcity hampered business for a time by raising the rate of interest. In a similar way it would be wise for China to declare that she would furnish her new silver coins to any amount on the demand of merchants, provided they would pay a corresponding amount of gold into the treasury at the fixed value determined. On no other condition, however, should the merchants be permitted to demand of the Government an increase in the number of silver and copper coins.

The merchants should be permitted to have gold coins furnished them at any time either with or without payment of a reasonable mintage charge, as seems best when the system is established, in exchange for gold bullion which they themselves pay in.

(b) Value Depends upon Confidence.

In order to maintain the value of the new coins, it is also necessary that the Government secure and keep the confidence of the public in connection with its management of the new system. This can be

done best by maintaining absolute faith as regards the quality of the coins, by the employment of the ablest experts of the highest reputation, and by publicity in connection with the management.

Heretofore the mints have, at times, used a larger amount of alloy than was provided in the law, and there has been no proper check over the asseys. In consequence the public has lost confidence in the coins of some of the mints. This must never be permitted to happen in connection with the new coins. Each melting for coinage must be carefully assayed, and under no circumstances should any coins be minted that are not of the right quality. In order to secure the confidence of the public, coins taken at random from the different mints from time to time should be tested by assayers not connected with the mints and their reports published. It would be well also, for a time, to have coins selected at random by persons not connected with the Government or with the mint management and sent to foreign mints to be assayed and reported on. The confidence of the public, both Chinese and foreign, must be secured and kept.

Publicity regarding the quantities coined and put into circulation will likewise tend to give confidence in the wisdom of the Government management, and such publicity should be encouraged.

The confidence of the public, in the first place, is necessary in order to maintain the value of the silver coins; and, in the second place, this confidence would be profitable to the Government inasmuch as, when the people trust the Government, the gold reserve, which it will need to carry, may be much smaller than will be the case if they distrust the Government.

2. UNIVERSAL ACCEPTANCE OF COINS BY GOVERNMENT.

The Government must receive its new coins at all times without hesitation anywhere in the Empire in the payment of any obligations due it.

(*a*) The acceptance of the coins without question by all Government officials will give the public confidence in the good faith of the Government.

(*b*) This acceptance by the Government makes also a demand for the new coins which will tend to keep up their value. While the supply of coins is still limited to an amount less than the ordinary demands of business require, this Government demand, of itself, might possibly be sufficient to maintain the value at the gold rate.

In some countries the annual revenue receipts of the government amount probably to 25 per cent or more of all the money in circulation. Even though the annual revenue of China should be considerably less than that, the Government demand would still be very great.

(*c*) It would be well, in the first place, probably, not to compel the officials, even in the provinces where the coins are introduced, to pay to the board of revenue more than, say, one-quarter and afterwards one-half of their revenue in the new coins, the amounts in every case being adapted to local conditions and to the local supply of the new coins; but finally, of course, they and all taxpayers should be compelled to pay all of their money taxes in the new coins. There should be, of course, no interference in this connection with the payment of certain taxes in kind. From the beginning, however, all of the officials should be compelled to receive from the people at their full gold

value all of the new coins offered to pay obligations due to the Government. Otherwise confidence in the Government would be lost and its credit would be seriously injured.

If the introduction of the new coins is made locally, province by province, it might very likely be possible almost from the beginning to compel the people in the localities where they are introduced to pay all of their money taxes in the new coins. Of course if a taxpayer does not have enough of the new coins in hand to pay his taxes, the Government will provide means through exchange shops with fixed rates to supply his needs, as will be explained in connection with administrative organization.

3. MAKE COINS LEGAL TENDER.

In due time the coins must, by law, be made legal tender (the legal money in which private debtors may pay their debts). A law of this kind is usual in all countries where a developed monetary system exists. It tends, of course, to add to the demand for the new coins and thus to keep up their value.

Such a law should not apply to debts made before the new coins are put in circulation. The people should also be permitted to make specific contracts payable in anything they like, but all contracts made payable simply in the money of the country, such as dollars or taels, the debtor should be permitted to pay in these new coins. If the creditor objects, the debtor should still have the privilege of paying the new coins into the court for the creditor and of having the debt discharged. This law should not be passed at first, but after the people have become accustomed to the new coins and know their real value.

4. GOVERNMENTAL SALE OF GOLD EXCHANGE.

The Government should be ready at all times after the coins are put into circulation to sell in exchange for these coins at their gold value, on demand, in amounts of not less than $5,000, orders (bills of exchange) payable in gold in London, New York, or Yokohama, at rates slightly more advantageous than the usual banking rates. If, for example, the usual average charge of the banks throughout the year is, exclusive of fluctuations in the value of silver bullion, say, three-quarters or seven-eighths of 1 per cent, the Government might offer to sell at, say, 1 per cent or $1\frac{1}{8}$ per cent.

(*a*) GOLD NEEDED FOR PAYMENT OF FOREIGN DEBTS ONLY.

Inasmuch as business conditions in China (the low rates of wages, the low scale of prices, the great number of very small transactions, etc.) do not require the use of gold in ordinary trade, there is no reason why the Government should offer to redeem the new coins in China itself in gold.

For the payment of obligations to creditors in foreign countries, however, gold is needed; and in no other way can the Government so easily secure the confidence of the great merchants and the foreign bankers as by supplying gold at a reasonable charge for the settlement of these foreign debts.

For the last thirty years Holland has found it possible to maintain for her silver coins a fixed value in gold without redeeming those coins in gold for use within the country. She has stood ready, however, to furnish gold at any time for the payment of debts abroad.

India, for a considerable time, maintained the value of her silver coins by scarcity alone. This, however, was always at a considerable risk that the coins might temporarily at any time, owing to a slackening demand, fall somewhat below their face value, and of late, since she has a large gold reserve, India has also been ready to furnish gold for the payment of foreign obligations.

In the Philippines the Government relies chiefly upon this furnishing of gold by means of bills of exchange for the payment of foreign obligations to maintain the value of its silver coins, although, inasmuch as it had a considerable quantity of gold and United States currency, which is at a par with gold, on hand in Manila, it offered temporarily to exchange this United States money free of charge for the new currency, and to exchange gold for the new currency at a charge equivalent to the cost of importation.

Instead of furnishing gold itself for the payment of foreign obligations, it will be equally useful to the people and much cheaper for the Chinese Government to sell bills of exchange, as indicated.

(*b*) Bankers Will Use Coins if They Can Buy Exchange.

In order to secure public confidence in the new monetary system, the bankers, especially the foreign bankers, and the great merchants must be willing to receive the new coins at their gold value. If the bankers and the merchants can always be sure of buying bills of exchange at a fair charge in exchange for the new coins, they will always be ready to receive and make use of them in their general business. There would never be any possibility of their falling in value more than enough to cover the difference between the charge for a bill of exchange which the bank would make and the charge which the Government would make, say one-half of 1 per cent. This amount is so slight that it would never be felt at all in local transactions; and, as a matter of fact, when the confidence of the public was secured, the difference would never be made by any of the banks. Other uses of the coins would be more than sufficient to cover any slight difference.

(*c*) Government Rates for Exchange.

The Government should probably charge rates somewhat above those charged by the banks. In the first place, the Government will probably not wish to compete with the banks in their ordinary business. In consequence, it places its rates somewhat higher than the banks, in order that the banks may ordinarily sell the usual bills of exchange. The Government will sell them only for the purpose of maintaining the value of the silver coins when there comes an unusually strong demand for gold, so that without action on the part of the Government the value of its silver coins might fall.

Should the Government establish a national bank it would be possible to arrange, of course, for it to sell bills of exchange against

the Government's gold reserve at the usual banking rates, thus competing with the other banks. It would probably, however, be better for the Government to have its rate fixed in the law, and for the national bank to use only its own funds and not the Government funds in competition with other banks.

(*d*) Profits from Exchange.

This business of selling bills of exchange, under the circumstances indicated, will also yield to the Government a small profit, which should be placed in the gold reserve.

5. COINS FURNISHED IN EXCHANGE FOR GOLD AT HOME OR ABROAD.

The measure recommended in section 4 will prevent the depreciation of the silver coins. In order to prevent an increase of the value of the silver coins above their gold value fixed in the law, the Government should agree always to furnish these silver and copper coins to any amount at their face value in exchange for gold paid in to the Government.

This gold might be paid in either to the treasury in China or to its agencies or to the branches or agents of its national bank abroad. In the latter case the gold paid in abroad would be used to purchase orders (bills of exchange) payable in China in the new coins at the treasury or at the national bank. When these drafts on the home Government are purchased abroad there should also be a charge made, as in the case of gold bills of exchange sold in China for payment abroad, although the rate of exchange may not be the same. This would likewise bring a small profit to the Government, and, what is of greater importance, as will appear later, will serve to prevent the exhaustion of the gold reserve.

VI, A. HOW CAN A 48-CENT DOLLAR BE MADE BY THE GOVERNMENT TO PASS FOR 55 CENTS GOLD?

[The following sums up in concrete form several of the points just made in VI.]

A silver dollar which weighs seventy-two hundredths of a tael is worth in China at this date in American gold about 48 cents. If that same dollar or an equal weight of silver could be given by action of the Government a value of 55 cents American gold, it would be worth about eighty-two hundredths of a tael. The Government can not, by mere decree, make seventy-two hundredths of a tael worth eighty-two hundredths of a tael, but it can take other measures so that all merchants will readily accept it at that value. Exactly that kind of result is secured by all the civilized countries except China.

The following shows the way:

If the Chinese Government takes seventy-two hundredths of a tael of silver bullion, coins it, and calls the coin the "imperial coinage dollar," it will be different in looks from any dollar now in circulation. Let it pay this new coin to an official for 82 tael cents; that is, if it owes him 8.20 taels, let the Government pay him 10 of the new dollars instead of $11.38 of the present dollars as the equiva-

lent of 8.20 taels. The official will readily take the new dollars at the rate of 82 tael cents under the following conditions:

1. The Government agrees always to take the new dollar anywhere in the Empire—Peking, Shanghai, in Szechuan, Honan, or elsewhere, instead of 82 tael cents due in taxes or contributions or in any other debt due the Government. If the official can pay it to the Government for 82 tael cents and the Government will surely receive it at that rate, he will not object to taking it.

2. The Government should pass a decree in due time, after the people understand the plans of the Government, saying that anyone who has a debt to pay to any other person may pay it in the new dollars at the rate of $1 for 82 tael cents. If the people know that the Government will always back them in paying their debts with the dollar at 82 tael cents, they will not object to taking it at that rate.

3. If the Government says, further, that it will take these new dollars and give in exchange for them an order to pay in London or New York or Yokohama 82 tael cents' worth of gold for each new dollar paid into its bank, all the foreign banks will receive them at that value, for they are buying orders on those places every day. If the foreign banks take them at that rate, all native banks and merchants will take them at the same rate, for they can be sure of paying them out at that. If the merchants take them at 82 tael cents, all the people will do so, for they will know that they may pay them out at the same rate.

4. The Government, too, having full control of the mints will not coin more of these coins than the needs of business demand, so that the people will always be using all that are in circulation, and this also will keep up the value.

By following these methods the Government could without cost to itself gain a profit of 10 tael cents on each new dollar coined. It would be practically as easy by the same methods to make a profit of 12 or 15 cents, and it would probably be best to make the gain about 20 per cent. It should be noted that this profit can be made on each piece only once, and that is when it is first coined and put into circulation. After that the dollar must be taken in by the Government at the same value at which it is paid out, so that there is no profit.

As 48 cents gold equals about 72 tael cents and 55 cents gold equals about 82 tael cents, it is shown above how a 48-cent dollar can be made to pass for 55 cents.

It is important to note that, if the new dollars are introduced into circulation in the way indicated above, very little gold will be required at first, and the gold reserve can be built up very gradually as the new coins go into circulation. If at first there should be distrust on the part of the people, so that they would wish to bring the coins paid out to them back to the Government in large quantities to buy gold with, it would be well to have on hand for the first few months a very large proportion of the coins issued. For example, for the first million dollars issued it might be well to let the people know that the Government had $750,000 gold in reserve; for the second million issued, say $500,000—that is, $1,250,000 for the two millions issued. This large reserve at first is to guard against any possibility of panic. The actual demands probably would be trifling from the first, and after two or three years the reserve could

probably safely be cut to 25 per cent, or even considerably less, provided the Government had made arrangements to borrow promptly on short notice.

If the Government pays out the new coins for salaries and supplies, deposits them in the banks, gives fair rates in the new coins for silver sycee and cash purchased, receives them everywhere for their full gold value in taxes, the people will very soon gain confidence and all persons having money to receive either for goods or for services will soon prefer to take the new dollar as the better dollar and the one steadier in value rather than the fluctuating Peiyang dollar or the inconvenient tael which has to be weighed.

VII. GOLD RESERVE.

1. A GOLD RESERVE NECESSARY.

As has been stated before, in order to secure public confidence and to insure from the beginning the maintenance of the value of the silver coins in gold, by methods which we have already discussed, especially by selling bills of exchange on a gold fund held mostly abroad, it is necessary to have a sufficient gold reserve.

It should be kept in mind, however, that the quantity of the gold reserve required on the system proposed would be very much less than if the redemption of the coins in gold on demand were made in the country itself. While, beyond question, when the system is being introduced there would be a certain speculative demand for bills of exchange from the interior on the part of bankers who could forward their new silver coins to Shanghai, Tientsin, and other places where the banks could use them in the purchase of gold exchange, this speculative demand would probably not last very long. It would depend upon the fact that at first a good many of the more ignorant people might be willing to sell the new coins, which would seem to them of light weight, at rates something below their face value. This danger could be largely obviated by having the Government give full information as to its means of conducting the business, and by the Government itself always receiving them promptly at their full gold value for money taxes of all kinds. This purely speculative demand on the gold reserve would of course stop as soon as the common people knew experimentally that the Government was maintaining the value of the silver coins.

2. AMOUNT OF RESERVE.

The amount of the total reserve required is extremely difficult to determine on account of the deficiency of statistics in China. In actual practice it must be determined more or less experimentally, depending upon the demand for coins. It will be necessary, on account of the lack of accurate information, to make ample provision so as to cover all risks, and to see to it that there is enough at each stage of progress.

According to estimates made by the best experts in America and Europe, this reserve should be, for a considerable time at least, from 25 to 30 per cent of the value of the new silver coins in circulation.

At the beginning, while the change from the old system to the new is going on, it will be necessary to have this gold reserve considerably

larger than 25 or 30 per cent of the coins at that time in circulation, inasmuch as there is likely to be a lack of confidence at first which may create a run on the reserve. Besides this fact, there will also be other coins and bullion in circulation for a considerable time. If there should be a slackening of business or a very strong demand for gold bills of exchange, the withdrawal of, say, even 50 per cent of the new coins in circulation might not contract the entire currency so much as would later, when the system is completely established, the withdrawal of, say, 10 per cent. After the system is thoroughly established, it is probable that a resrve equal to 10 or 15 per cent of the circulation will be sufficient for actual use, although 25 or 30 per cent should always be available on short notice.

In consequence of the fact that the reserve fund may be put to only special uses—i.e., to the redemption of the new silver in bills of exchange, etc.—it will doubtless be possible to keep part of it in good foreign bonds on which cash could be promptly realized. Again, so far as a part is concerned, it may be sufficient possibly, instead of keeping cash or bonds on hand, for arrangements to be made by the Chinese Government for a mere right to draw bills of exchange up to a certain amount on, say, two days' notice, the regular rates of interest to be paid only on the amounts drawn. This privilege could doubtless be obtained at a very small charge if the management had the confidence of the great banking houses.

According to the estimates of the Director of the Mint of the United States, the stock of silver in China at the present time is probably in value 750 million dollars Mexican, in round numbers, say, 482 million taels, or, say, \$337,400,000 American gold. If we assume a population for China of 400 million (an outside figure; the Director estimates 330,100,000), this would give a per capita circulation of 1.205 taels, or substantially 84.35 cents gold. If the new dollar were issued at, in round numbers, 2 shillings, 1 yen, or 50 cents gold, or a little more, it would doubtless be sufficient for the time being to allow two of the new coins per capita, or 800 million for the entire country when the system is completed. In order, however, to be sure to cover all possible expense in our first estimate, we take a figure more nearly like that of India and assume a profitable circulation of some 8 shillings, or \$2 American gold, or, say, four of the new silver coins per capita, making 1,600 million.

At the present time, according to the same authority, the per capita circulation of China and of several countries which may be compared with it is, in gold, as follows:

TABLE II.

China	[a] \$1.02
Turkey	3.75
Japan	3.24
Cuba	2.19
Bulgaria	1.32
India	2.07
Egypt	3.71

[a] The figures are \$2.27 Mexican, which would amount to about \$1.02 American, according to the price of silver when this is written. No other country in the list has so low an estimate. One of the best-informed Chinese bankers estimates the present silver circulation at 100 million taels, of which 10 per cent is paper and the rest bullion or dollar coins. He estimates the copper circulation

Of course countries with more highly developed business have a higher ratio. For example:

The Straits Settlements	$8.03
Great Britain	18.31
Germany	20.48
United States	29.79
France	39.22

It is evident that four new dollars per capita would be a sufficient outside amount to take into consideration at the beginning of the new system. It would take several years at any rate to have the system established throughout the country, and experience would eventually show the amount required. While the conditions in China resemble those in India more than in any other prominent country mentioned, the probability is that conditions are even less developed, so far as the use of money is concerned, in many parts of the interior of China than in India, where a system of coins has been in use many years. It should be noted also that the per capita circulation in India, as given in the table, includes 11 cents per capita for paper money uncovered.

It would be advisable, of course, for China to introduce the system first in the treaty ports or in some of the most populous provinces and then gradually to extend the system throughout the country. The population in the treaty ports probably does not exceed 8 million, while the population of the four provinces which contain Shanghai, Canton, Tientsin, and Hankow is about 100 million. If we assume that China, within the first five years (after) she began the coinage, could supply 400 million of the new coins, that would cover practically all parts of the country which have any direct dealings with foreign countries or which can be considered commercial to any noteworthy extent. A system that is made thoroughly successful in these sections of the country and with this class of the population for a series of years will, without especial difficulty, make its way through the rest of the country. An actual reserve, therefore, of, say, 33⅓ per cent of this sum of 400 million of new reserve coins, with the privilege of increasing it to 50 per cent or even to double the original amount in case of need, would certainly be ample provision to make for the introduction of the system. It would not be necessary, of course, for the entire final reserve to be raised within the first four or five years after the system is started. If the amount mentioned above were sufficient to carry it through the first five or six years with safety, experience would show how to take care of the system from that time on; but according to all reasonable calculations, if the price of silver were to remain where it is now or not to increase considerably, the profits from the coinage alone would probably prove ample thereafter to continue the reserve at a sufficient figure until the completion of the system.

The figures given above are the highest that the writer has ever heard estimated, and are given as outside figures which would be safe under the most adverse circumstances. On the basis of most esti-

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at 50 million taels, of which 50 per cent is paper. He thinks the country needs more money, but gives that as the present amount. That estimate allows only 37.5 tael cents per capita, or 50 cents at a population of 300 million, the least assumed. Unless this estimate is ridiculously wrong, an allowance of two new dollars per capita is ample for the present.

mates, and those largely of Europeans long resident in China as bankers and merchants, one-half of the sums mentioned would probably suffice, and those are the figures recommended as best to assume. It would doubtless do to begin the system on one-half the estimates given all around, provided arrangements were made to increase in case of necessity to the higher figures, and provided also that the management were watchful and skillful and had the confidence of the public, native and foreign. The figures are tabulated by years of work in the next Chapter, VIII.

3. USES OF THE RESERVE.

This has been explained sufficiently for present purposes in earlier discussions.

4. MEANS OF OBTAINING A RESERVE.

(*a*) PROFITS ON COINAGE.

The profits of the coinage of the silver, nickel, and copper coins, if the prices of silver and copper do not increase materially, ought to amount to as much as 20 per cent. The experiences of the Philippines and of Japan seem to justify this estimate as reasonably conservative. Of course all would depend upon the value which the government determines to give to the coins, and it can, within reasonable limits, fix its profits. According to the best experts it is desirable that the face value of the silver coins be at least 15 per cent above the usual bullion value in order to prevent the danger of the melting down of the coins if there should be an increase in the price of silver bullion, which would make the coins more valuable as bullion than as coins. On the other hand, it is not desirable that the profits be too high on account of the danger of counterfeiting. It is probable that so far as the unit coin (the dollar) is concerned, a reasonably safe profit of about 15 per cent is about right. From the present outlook regarding the future price of silver the margin had better be somewhat above 15 per cent rather than below it. On the subsidiary silver coins, on account of the less danger of counterfeiting, and also because the principle of scarcity can be applied somewhat more rigidly to maintain their value, a somewhat higher profit may be made. If the dollar coins are nine-tenths fine, it is entirely possible that the subsidiary silver coins might be made eight-tenths fine. The disadvantage of the larger amount of alloy in the subsidiary coins is that people might at first hesitate somewhat about receiving them; but that danger would soon be overcome if the government adopted the right measures of interchanging them for dollar coins on demand. The second danger of greater importance is that of counterfeiting.

On the nickel and copper coins, of course, a much greater profit can readily be realized. On such coins a profit from 50 to 100 per cent is not unusual. As in China the quantity of copper and subsidiary silver coins would be unusually large, a profit of 20 per cent on the entire coinage for five years is probably safe to assume. Mr. Sakatani, vice-minister of finance of Japan, assumes a profit of 30 per cent.

It should be kept in mind also that if an increase in the value of silver bullion lessened materially the profit of the Government, it would also lessen the Government's risk at the same time. A decided rise

in silver in the London market would rather have a tendency, other things equal, to lessen the demand on the gold reserve, both by encouraging the payment of foreign obligations through the export of silver and by giving confidence in the Government as the risk from depreciation of its coins lessened. Moreover, if, owing to a threatened exhaustion of its gold reserve, it were eventually forced to sell some of its silver coins to meet a temporary emergency, it would realize a higher price for them. In no event would it lose more than the cost of coinage and freight, unless the bullion value of silver fell between the time of its purchase of bullion and sale of coin.

The profit on coinage should all be devoted, for a considerable time at least, to the purchase of gold for the gold reserve. If it should be necessary to get any considerable extra sum in hand at any one time, it would be possible to use this reserve and the silver on hand as a basis for a temporary loan of a few months, provided the Government authorities had the full confidence of business men. It probably would not be wise, however, to count on this as a basis for any but a temporary loan.

(*b*) CONTRIBUTIONS.

The Government has already made provision for the accumulation of a gold reserve by permitting contributions from certain classes of officials to be paid part in gold or in silver at the ratio of 32 to 1. It might be well to encourage as far as possible the income from this source. Possibly other similar sources can be discovered which will add considerable sums to the gold reserve.

(*c*) LOAN.

The Chinese Government might very profitably, considering the importance of the change of the monetary system and the profits of coinage, make a loan, of which a large part of the proceeds should be placed in the gold reserve. The direct gain from profits of coinage alone ought to make this loan very profitable, even if the extra capital needed had to be borrowed. In private life to borrow at 6 or 7 per cent and to make 20 per cent is considered very good business. China ought to be able to make better rates than those.

If the foregoing estimates regarding the profits from coinage are not excessive, it will be noticed that these profits will amount regularly, at the rate of coinage suggested as sufficient for beginning, to $8,000,000 a year for a period of twenty years if the smaller estimates are taken; to double that if the larger are assumed. If the rate of coinage were increased, the income would be proportionately increased, although the time of its duration might be correspondingly lessened.

However, even if this profit of 8 or 16 million dollars a year is made for the Government so that it becomes Government property, it could probably not be used for anything else than a gold reserve; that is to say, it could not become one of the regular revenues of the Government to be applied to other purposes, at any rate for a considerable time. Later, part of it might possibly be used in such a way. On the other hand, unless the statements made heretofore regarding the benefits to China of a monetary system established on this basis are grossly mistaken, the indirect benefits to China from the system

would amount to much more than the cash profits from the coinage thus placed in the gold reserve. Before the system were entirely completed it is probable that as a result of its establishment the added revenue to the country from other sources would be enough to much more than pay the expenses of any loan required. Every increase in imports or exports increases both customs and likin receipts, while investments and confidence lead to increased revenue from other sources.

In estimating the expenses of a loan, also, it should be kept in mind that, so far as the loan is required for the gold reserve, a considerable part of it could be kept as a current balance in the banks either at home or abroad, and thus be made to realize a considerable return in interest, doubtless 2 per cent; and in some cases more. The government of the Philippine Islands has realized 3½ per cent. If experience showed that the demand on the gold reserve was comparatively small, a considerable portion might also be kept invested in securities, Chinese or foreign, which would pay part of the expenses of the loan, probably 3 to 4 per cent. At least half of the reserve, on the average, might thus draw interest; probably a much larger proportion than one-half might secure some income.

As a basis for a loan, if any is needed, the following sources are suggested:

(1) *Increased returns from customs.*—The annual increase of the returns from the imperial customs. The annual income at the time of the establishment of the indemnity, it is understood, was practically all required for the payment of that indemnity. The trade of China, however, is rapidly increasing, and there is, in consequence, a large annual increase in the returns from the customs. If the Government can secure its support on the basis of the income of three years ago and assign this increase in the customs to the establishment of a monetary system, this might be used as the basis of a considerable loan.

(2) *Opium, spirits, etc.*—From investigations made throughout the provinces, it is evident that the Chinese Government is not receiving, either through the central government or through tne provincial governments, nearly so large an income from opium, spirits, tobacco, and other similar products as is usual in other civilized countries. In the United States, for example, the central Government alone derives from the manufacture and first sale of such products, mostly spirits and tobacco, ordinarily nearly half of the entire national revenue. Besides this, the municipalities derive a large additional income from licenses issued to shops where these products are sold. In India, in 1902, the Government derived from opium alone a revenue of 72,781,000 rupees, or, in round numbers, about 36,400,000 taels. From salt it received only about 89 million rupees, say 44,500,000 taels.

It would seem probable that by a proper organization of the service and an increase in the tax, the Chinese Government might realize from opium a much larger revenue in the near future without any tendency toward increasing the quantity of opium used. The Government would also derive a very great advantage in securing a much greater control over its production and use, which would enable it more easily later to adopt whatever measures might seem advisable. Probably similar provisions might be made, although they would be

of less importance, with regard to spirits, wines, tobacco, and similar luxuries.

The succeeding note offers some suggestions regarding an opium farm for certain cities.

(3) *Land tax.*—Sir Robert Hart has suggested an increased revenue from the land tax, the provisions of which are familiar.

(4) *Mines.*—It seems to be the general opinion throughout the provinces, particularly among business men and those who have looked somewhat carefully into the subject, that a considerable increase in income might be derived from the development of those mines of China, the revenues from which have not already been assigned, and that, if it were desired, a loan might be made on this security.

In order to secure such an increase in revenue and to manage it to the best advantage, it is necessary that the Government have a somewhat accurate and detailed knowledge regarding the mineral resources of China. This could probably be most readily secured if the Government, through the board of commerce, were to organize a central mining bureau. This bureau should undertake at once a careful survey or prospecting of the chief mining resources of the Empire under the direction of experts who would have the full confidence not merely of the Government itself, but also of investors everywhere. In the case of all mines which seem important very careful estimates should be made by these experts of the probable income which might be received from each mine under proper royalties. When this estimate was in hand the Government could judge reasonably well regarding the amount of money which could probably be borrowed on this basis. Of course no investors, either Chinese or foreign, would be willing to make a loan so large that its interest and amortization fund would exhaust the estimated royalty. Capitalists might readily be found, however, who would be willing to make a loan the average support of which might amount to, say, a half of the royalty. This would, on the average, give an ample security. The other half then, in case it were actually realized, would go into the general treasury of the Empire.

When the mining bureau once had full knowledge of the mines at its disposal it would be in a position to grant privileges on these mines on reasonable terms on the basis of the experts' reports. Investors would, of course, send their own experts, at first at any rate, to investigate the mines which they were proposing to develop or on which it was their intention to make a loan; but if the Chinese had employed experts of equal skill every such investigation would serve not only to confirm the judgment of the Government experts but likewise to add to the credit of the Government itself. When the permit for the working of the mines was given, until a sufficient sum had been secured for the monetary system, it might well be made on the basis of a loan of reasonable size. It is the opinion of a good many experts who have thought out the matter somewhat fully that from the mineral resources of the country there might be realized in this way a considerable sum within a comparatively short period—enough probably to supply the needs of the monetary system.

(5) *Railroads.*—It is probable that there are also some railroad concessions which might be used in the same way under the direction of the board of commerce.

(6) *Other sources.*—Probably the board of revenue can suggest other sources of revenue; for example, a house tax, such as has been employed in Canton; a business tax, such as is common throughout Europe and in the Philippines; or others. Of course, any such taxes should be levied with discretion and with care not to interfere with business. There can be little doubt, however, not merely that it would be extremely profitable to the Chinese Government, but also very beneficial to the Chinese people, to make the sacrifice of slightly additional taxes or of the use of some of the new sources of revenue suggested, amounting, say, to from two to five million taels a year, in order to establish a new monetary system, which would probably bring an annual profit for a good many years of from six million taels a year upward, besides the still greater indirect benefits already mentioned.

6. MEANS OF MAINTAINING THE RESERVE.

Most of the means of maintaining the reserve at a sufficient amount after it has once been established have already been indicated in connection with the maintenance of the gold value of the silver and copper coins, so that this subject may be treated quite summarily. The following methods may be noted:

(*a*) GOLD PAID IN.

In case individuals wished to have silver and copper coins issued to them individually, in addition to those which the Government has put into circulation by the ordinary channels, the Government should coin and issue such silver and copper coins on demand in reasonable quantities for gold deposited. Such gold should be placed in the reserve fund.

This has been the chief source, practically the only source, of raising the gold reserve in India. It could doubtless be made eventually to become a considerable source of gold revenue for China. It is not well to depend upon it too much, as, in order to have it work most efficiently, it would be necessary so to limit the quantity of coins that business might be considerably hampered. Moreover, it should be kept in mind that full confidence in the administration and high credit is needed to make this source effective.

(*b*) SALE OF SILVER BILLS ON CHINA.

In connection with the above is the sale of bills of exchange for gold by the Chinese agencies abroad, these bills of exchange to be drawn on the treasury in China or on the national bank acting as the agent of the treasury, and to be payable in China in the new silver coins. It is not necessary that the rates charged by the agents of China abroad for bills of exchange payable in the new coins in China be the same as those charged by the Chinese Government for bills of exchange payable abroad in gold from the gold reserve. In fact, if it seemed that there were danger of the exhaustion of the gold reserve, the Government might make the rates favorable enough, so that it would become an active competitor of the foreign banks in selling these bills of exchange. Of course the persons in charge of

the system would need to exercise very careful discretion in determining what those rates may be, in order, on the one hand, to maintain the system in its integrity, and, on the other, not to interfere unduly with private business.

(c) Buy Gold Exchange.

In case of very heavy drafts on the gold fund, so that there seemed danger of its exhaustion, the Chinese Government, either through the national bank or through other special agencies, following the example which Japan set in more than one instance, might enter the market and buy in competition with others in Shanghai, Tientsin, and elsewhere, for silver, foreign bills of exchange payable in gold in London, New York, Yokohama, or elsewhere; the products of these bills of exchange when collected in gold to be placed in the gold reserve.

(d) Profits on Exchange.

From the sale of bills of exchange on the gold reserve held abroad, as well as from the sale of bills of exchange on the Chinese treasury payable in the new silver coins of the country, small profits would, of course, be realized. These would naturally be placed in the gold reserve. While they would in all probability amount to a considerable sum each year, they would naturally form but a small part of the gold reserve as a whole. They are therefore to be looked upon as a subordinate means of maintaining the gold reserve.

(e) Sale of Silver on Hand.

Another resource is also left in case of an emergency, a means which was advocated by Mr. Lindsay, of the Bank of Bengal, when it was proposed to establish earlier a gold reserve for India.

In case very large quantities of the new silver coins are paid into the Government treasury in exchange for bills of exchange on the gold reserve, these coins are to be held in the treasury until there comes a strong demand on the part of business men for them to be paid out, a demand which would be manifested ordinarily by the deposit of gold, either at home or abroad, for this purpose. It is evident that such deposits of gold would not be made as long as gold exchange is demanded. The Government would therefore have in its vaults large quantities of silver coins. If the gold were not forthcoming elsewhere, it could either borrow temporarily on the security of these coins or could finally sell them on the market as bullion, either for local use or for shipment abroad. Such a sale would involve a loss to the Government of the cost of coinage, and possibly also some shipment charges. Beyond that, however, there would be no loss suffered, provided the price of bullion remained the same, inasmuch as the Government would itself have bought the bullion originally for coining these pieces at market bullion rates. There would be a loss of coinage and recoinage, but this would be a very small per cent, possibly 2, or even 4 per cent, with freight charges, and might well be suffered rather than to take any serious risk of the exhaustion of the gold reserve and the depreciation of the coins already in circulation.

NOTE.—*An opium farm for some of the cities of China.*

In the article on a gold reserve, under (*c*) (2), it is suggested that the Chinese Government does not receive so large an income from opium, spirits, etc., as is usual in other countries or as is desirable. In order to secure a sufficient basis for a loan of the new monetary system and in order to get this return within a year, which would be soon enough for the inauguration of that system, it has been suggested that the selling of opium in the larger cities like Canton, Shanghai, Hankow, Foochow, etc., might be made into an opium farm; that is, that the monopoly of this sale, including the selling through the opium shops where opium is consumed, be made a monopoly and be sold to an individual or syndicate who would pay the largest amount for it, and would conduct it in accordance with the law.

The Government would then lay down whatever regulations it saw fit for its introduction into the city, and its sale, fixing, if it thought best, the quality, prices, restrictions regarding persons to whom it should be sold, the number of shops where it should be sold, with their location, and any other regulations that seemed desirable. The money for the farm should be paid quarterly in advance, so that the Government could count absolutely upon the amount of revenue and upon the date when it would be received.

This system should be applied to enough cities to furnish the revenue required for the loan. This law would form a good basis for the proper taxing of opium, and might later be extended to include a general opium monopoly by the state, or it might take whatever other form seemed advisable. It was suggested that a commission of three men, to consist of two Chinese and one foreigner, the foreigner presumably a man from the imperial customs who knew something regarding the conditions of opium importation, etc., and who could speak Chinese, should be sent at once to Singapore, the Federated Malay States, possibly to Java, Sumatra, Manila, and Formosa, to see how the farms are run in those different places, where they have them. They should then go to Canton and these other Chinese cities, and after informing themselves about conditions there, have charge of the selling of the opium farm. The farm should presumably be sold for a year at a time, with the expectation that if the farmer did his work well he should have a certain priority in the succeeding year.

An opium farm of this type would presumably bring in a certain revenue more promptly than almost any other tax that could be devised. As soon as the farm was sold it would make an absolute basis for a loan, so good that a loan could doubtless be floated at a low rate.

The chief advantages of the system are (1) the prompt and certain income; (2) the ease of enforcing the law, inasmuch as the opium farmer, in order to keep his monopoly, would himself see to the enforcement of the law against all other persons besides himself. He himself has so much money invested that it would not pay him to take the risks of violating the law under penalty of forfeiture of his farm; (3) the ease of changing the system for another at almost any time whenever the change might seem desirable.

Of course the dangers of a farming system like this are not overlooked. There is danger of evasion of the law, of a poor quality of opium, etc. In many respects a Government monopoly is preferable. On the other hand, considering present conditions in China—the difficulty of handling honestly Government monopoly, the need of immediate and certain returns, etc.—it is probable that the opium farm would secure the needed revenue more certainly and promptly than the other forms of tax suggested.

VIII. COST OF ESTABLISHING THE NEW MONETARY SYSTEM—ESTIMATES.

It is assumed in suggesting these figures, in order to make the estimates at the highest possible cost, that the population of China is, in round numbers, 400 million; that the new monetary standard coin shall be a dollar about equal to the present Peiyang or Canton dollar in size and weight, and that it is given a gold value slightly above that of the Japanese yen, enough to insure the requisite profit. It is within the power of the Government to fix the rate of profit at the beginning.

There are two bases of estimates, the first assuming that China will need eventually, when the system is completed, four of these new dollars per capita. This is an outside estimate, larger than is usually given, and larger probably than is needed. The second assumes a circulation of two of the new dollars per capita, is the one more generally given, and is the one recommended. It is ample for starting the system, though the rate of coinage might be increased if the coins went into circulation readily.

FIRST ESTIMATE—$4 PER CAPITA.

The circulation for the entire Empire when the system is completed will be 1,600 million dollars.

In the four chief provinces of China which are especially connected with foreign trade—Chili, Kiang-sü, Hupeh, and Kwang Tung—and which contain all of the leading commercial cities—Tientsin, Shanghai, Nanking, Hankow, and Canton—there is a population, in round numbers, of presumably some 100 million.

If the new monetary system is once well established in these provinces and the fixed value of the coins maintained in terms of gold, there will be no difficulty whatever in extending it on that basis through the rest of China. In consequence the estimates here given are on the basis of supplying these four provinces completely with the new coins. In actual practice it is probable that a good many of the more remote districts of these provinces might not be well supplied at that time, while some of the cities of the other provinces, such as Shantung and Fukien, would be supplied, but the quantity mentioned would be ample work for the first five years. The figures given are high enough in every case so that they are believed to be entirely safe. The following table, in millions of dollars, gives for each of the first five years the amount to be coined, the profit on the coinage at 20 per cent, the amount in circulation, the percentage of the circulation to be held as a gold reserve, the amount of that re-

serve, and the amount to be supplied to the gold-reserve fund, by loan or otherwise, outside of the coinage profit:

TABLE III.

Year.	Amount coined.	Coinage profit.	Amount in circulation.	Circulation in reserve fund.	Reserve.	Amount to be supplied from loan or tax.
				Per cent.		
First	$80	$16	$80	75	$60	$44
Second	80	16	160	50	80	4
Third	80	16	240	$42\frac{11}{12}$	103	7
Fourth	80	16	320	$37\frac{3}{16}$	119	....
Fifth	80	16	400	$33\frac{3}{4}$	135	....
Total	400	80	400	....	135	55

It will be noted that the larger part of the loan or special tax is called for during the first year. There are two reasons for this. In the first place, the special runs on the new system are likely to occur during the first year rather than later. On that account it might be thought advisable, for a time at least, to be ready to supply gold if necessary to a certain extent in exchange for the new silver coins within the country itself at a charge equivalent to the cost of shipment of gold from Europe. This should not be adopted as a general policy, and it is questionable whether it should be done at all, but provision for a very large reserve to guard against possible runs should be made.

In the second place, while the bulk of the circulation is still in other coins or in bullion, especially before their importation is stopped, it is possible that in order to test the system a very large percentage of the new coins would be presented to buy gold exchange with, even at the rather high rates charged for bills of exchange. After the system is finally established, the withdrawal of the coins from circulation on their presentation to buy bills would so contract the currency that the rates charged for bills of exchange would certainly fall, i. e., a fixed amount in sterling—say, £1,000—would cost less in the new dollars, or a fixed amount of the new dollars would buy a larger sterling draft as the dollars became scarcer. But while there remained a large circulation of other coins, and particularly while importation of other coins might continue, it is possible that this might not be the case; hence the necessity during the first year or two of a very large reserve which could be used if necessary. It is absolutely essential to the success of the system that sufficient provision be made so that the absolute confidence of the business world, both Chinese and foreign, be assured beyond question.

SECOND ESTIMATE—$2 PER CAPITA.

This estimate is much more reasonable on the whole and is ample for a safe starting of the system, though if experience shows that the coins are readily used and the system rapidly wins success, provision should be made to increase the rate of coinage and the amount

coined. The following table in millions of dollars shows the figures for each of the first five years and the totals:

TABLE IV.

Year.	Amount coined.	Coinage profit.	Amount in circulation.	Circulation in reserve fund.	Reserve.	Amount to be supplied from loan.
				Per cent.		
First	$40	$8	$40	75	$30	$22
Second	40	8	80	50	40	2
Third	40	8	120	42½	51	3
Fourth	40	8	160	36¾	59	....
Fifth	40	8	200	33½	67	....
Total	200	40	200	....	67	27

In either case it would be desirable to make contracts in the cities where the gold reserve is kept for making further temporary drafts in case of an emergency—that is, an option to draw to an amount named would be bought. As long as it is likely that this privilege would not be needed, it is probable that the charge for the mere privilege would be slight. In case use should be made of it the Government would, of course, pay the usual rate of interest for the length of time it kept the money, say from one to four months. It would be easily possible, doubtless, to give to an institution from which this option of drawing was obtained a warning of a day or two at least. Probably a warning of even a month could be given.

In addition to the monetary circulation itself, it is necessary that there be some working capital. It is probable that from the present sources of income of the Chinese Government something could be furnished; but in order that the entire expenses may be estimated, it is thought best to add a sum for working capital. Under the first estimate, in order that the principle of giving the highest charges to everything be maintained, this sum may be placed at, say, $25,000,000. This would be sufficient to provide a liberal amount of bullion for the mints, to incur some expense in organizing the mints anew if necessary, and to make some provision for the initial establishment of exchanges and agencies for the introduction of the new system. It is possible that this sum would also pay the provinces, in part at least, for the mints taken over. This would make, then, to be raised from outside sources, i. e., from a loan or special tax, $80,000,000.

Under the second estimate we may place the figure for expenses at, say, $13,000,000. Doubtless a smaller sum would serve to run the mints, but not to the best advantage, provided many other expenses arise, inasmuch as it is desirable always to be sure of keeping an ample supply of material on hand. The payment for present mints is not included. This would make a total from outside sources, a loan or tax, under this estimate, of $40,000,000.

Inasmuch as the present accounts of the Chinese Government are kept in K'up'ing taels, it might be convenient for purposes of computation if these sums were put into taels. It is assumed that the new dollar will be slightly more valuable than the Japanese yen. The K'up'ing tael is somewhat heavier than the Shanghai tael. According

to late quotations, exchange on Yokohama was 80 Shanghai tael cents per yen. We may perhaps safely assume for the present purpose that the added value of the K'up'ing tael as compared with the Shanghai tael corresponds to the added value of the new dollar as compared with the yen, and reckon the new dollar as worth 0.80 of a K'up'ing tael. In that case the amounts to be raised would be, on the different estimates, respectively, 64 million taels and 32 million taels.

If an estimate of 7 per cent interest is assumed in order to get the annual charge, we shall surely be taking an outside limit. It is probable that the loan could be made at considerably less than that. At the rate of 7 per cent, under the first estimate, the annual charge would be 4,480,000 taels; under the second estimate, 2,240,000 taels. If we may judge from the practically universal experience with such funds, however, a considerable portion of the gold reserve could be kept on deposit at call in the great business centers, whether in Europe, America, or China, so that it would bear interest. It is clearly a conservative estimate to assume that a half of the reserve is drawing 2 per cent interest. It is probable that it would be considerably more than that.

The first year we should have a reserve of 60 million dollars; the fifth year, 135 million dollars. It will perhaps be fair to take an average of these sums for the average reserve during the first five years, $97,500,000, the interest at 2 per cent on half of which amounts to $975,000. Reducing this to taels at the same rate we get 3,700,000 taels, to be deducted from 4,480,000 taels, leaving 3,700,000 taels as the net expenditure. In the second table, reckoning in the same way, the annual net revenue at 2 per cent for the first five years would be 388,000 taels, to be deducted from 2,240,000 taels, leaving an average annual expenditure of 1,852,000 taels.

If to these sums, respectively, be added, say, 1 per cent of the average reserve for the privilege of drawing an added amount equal to the reserve for any few days at a time when that might be needed, although in all probability it never would be needed, this will restore the annual charge to the figures given originally; that is, 4,480,000 taels and 2,240,000 taels.

When one considers the enormous benefits to China, as they have been stated before, which would accrue from these expenditures, the latter seem very slight indeed. These estimated charges themselves per annum would probably, in actual practice, suffice to pay off the debt incurred by the time the monetary system was made complete, provided the rate of coinage, the profits of coinage, and the amount to be coined remained as indicated in the estimates, and estimating that it will require twenty years for the complete establishment of the system. The following considerations indicate that result: The gold reserve could be made proportionally less before that time; the interest on current balances would increase decidedly; the reserve has been reckoned against the entire circulation, whereas it would not need to be kept for redemption of copper coins, etc. It is best, however, to make provisions against all possible risks, so that the above outside figures are given. It would be desirable to introduce the system more rapidly than indicated here. In that event the cost to the country would be less, since the benefits to the country would be cor-

respondingly greater, inasmuch as the benefits would take effect sooner.

If for an expenditure of 4,480,000 taels a year a cash income of 12,800,000 taels can be secured, and for an expenditure of 2,240,000 taels one of 6,400,000 can be secured, aside from all the other vastly greater benefits of established credit, of increased trade, of increased revenues, etc., it would seem that the most strenuous efforts ought to be made to secure the sum needed from year to year in order to keep up these benefits.

It must not be forgotten that if the system, instead of being established with the coins on a fixed parity with gold, is placed on the silver parity, the profits of coinage will be reduced by three-fourths, at any rate, whereas the cost of minting and other incidental expenses of introducing the system would not be reduced at all. Moreover, there would be lost a very large proportion of the advantages that would come from an established credit, an increased investment of capital, etc. Beginning on a silver basis and afterwards transferring to gold would lose absolutely at least three-fourths of the profits on all the coinage issued before the system was established and would, beyond much of any question, postpone the completion of the system to a period at least double that which will be required if the system is started on the gold basis. It becomes a matter of the gravest importance, therefore, that the whole plan be thoroughly thought out before any positive action is taken.

If it is rightly managed, the system not merely costs nothing in the long run; it is a source of large actual cash profits from the first year. It is a very profitable financial investment. If the sovereign power of the State which enables it to make these profits could be loaned to a private company, such a company would willingly pay the Chinese Government several millions of taels a year for the privilege of starting and running the system without any expense to the Chinese Government. It would, of course, be inadvisable to give such power to a private company; but the fact shows the opportunity which is presented to the Chinese Government by the present conditions. All other civilized countries on the gold basis are using this source of profit to advantage; but as the chief profits come from the new coinage they make much less than China can make, which has to coin anew its entire circulation.

If the Chinese Government finds it difficult for two or three years to secure additional revenue to pay the interest on the loan, it will probably be practicable to pay the interest for three years at least out of the seigniorage, so that the Chinese Government would thus establish its monetary system on a gold basis without any expense to its revenues for the first three years, provided the price of silver remained substantially the same. It is probable, of course, that this period might be extended a year or two; it is possible that it might be shortened a little. From careful discussion of the subject, however, with business men accustomed to floating foreign loans and dealing with financial matters of that type it is practically certain that a loan could be made on the security of the gold reserve, with the interest to be paid for three years at least out of the profits of the coinage. This would be sufficient time for the Government to start almost any new system of revenue which was necessary in order to meet expenses thereafter.

IX. ADMINISTRATIVE ORGANIZATION.

1. CONDITIONS OF SUCCESS.

(a) THE CONFIDENCE OF THE PEOPLE—CHINESE AND FOREIGN.

(1) That they may readily take the new coins at their face value.

(2) That they may subscribe money for a loan or the establishment of a national bank.

(3) That the banks, especially the native banks, may accept the coins in connection with foreign exchange and the gold reserve.

(b) SUFFICIENT CAPITAL.

(c) SKILL IN MANAGEMENT OF THE SYSTEM.

These three are all needed for the success of the system, whether the coins be given a fixed value in gold or not, though especially needed in the latter case.

2. HOW TO SECURE THESE CONDITIONS.

(a) MEANS OF SECURING CONFIDENCE.

(1) *Publicity.*—If everybody knows well what is being done and how the system is managed and if the work is well done, confidence is assured. This will require a careful system of accounting and the regular publication of accounts, as is the case in most of the advanced countries.

(2) *Absolute good faith and uprightness in the management, and public belief in this good faith.*—At present the public has not always sufficient trust in the good faith of the Government to give it its full confidence. The management must be such as to secure that confidence.

(3) *Management in the public interest, and public belief in that.*—At present there is sometimes, unfortunately, a belief that some of the business of the Government is managed in the interest of the officials. The new system must be managed by business methods, and it will be easier to secure public confidence if it is managed, as far as is practicable, through the banks and other business men.

(4) *Skill and knowledge in management and management through such agents that the people will trust their skill.*—It is not sufficient that the men have sufficient knowledge unless they are those whom the public, on account of their general reputation and of their connections, will trust.

(b) CAPITAL.

In order to secure capital the public confidence must first be secured, and the plans adopted must meet the approval of the leading capitalists. After that the methods of raising capital by loans or subscriptions have already been sufficiently discussed under the question of a gold reserve.

(c) Skill in Management of the System.

Men for the different positions of responsibility must be chosen who from their training and experience will be known to have the requisite skill. It will not be sufficient to select merely men of promise. The men in the most important positions must have been already tested.

3. THE OFFICIALS NEEDED.

(a) The Monetary Commission or Board of Revenue.

Either the monetary commission or the board of revenue will presumably have the general supervision of the system as a whole, and the officials appointed will be subordinate to them.

Presumably it would be well for some one person in this commission to be designated as an active official to give his full time to the work and to represent the commission as a whole.

(b) An Expert (Controller) in General Charge of the System.

He should be held responsible for the general management of the system as a whole under the commission, and, generally speaking, of course, his recommendations should be followed. He should take no important step without the full knowledge of the special manager of the monetary commission, already mentioned, and matters of chief importance should receive the sanction of the full board.

He should be ex officio a director of the national bank, and should have immediate direction of the gold reserve, acting through the bank, where practicable, and also under the oversight of the commission. He ought not to have any control over the revenues except in the monetary system.

Presumably he should live at Peking. He should nominate to the board for appointment the other chief monetary officials.

(c) Deputy Controller.

Inasmuch as Shanghai is the most important business place in China, and inasmuch as questions of exchange, as well as other important matters in connection with the system might presumably come up there first, it would be advisable that, when the system is started at Shanghai, there be a deputy controller resident there who would have the confidence of the commission, and who, agreeing in general policy with the controller and the board, would represent the controller in Shanghai.

(d) General Accountant.

The necessity of accurate accounting and publicity has already been mentioned. This can not be secured to advantage unless the accounts of the different mints and of the different branches of the work be kept in accordance with an harmonious system. The general accountant should, therefore, determine the methods of accounting throughout the system; should receive in detail from the mints

and other branches of the work, including the national bank so far as its work is connected with the monetary system, uniform reports, and should be held responsible for the regular publication of accounts so far as matters are to be made public. He should collect statistics for the commission, be the agent to send out notices of rates of exchange, etc.

(c) General Superintendent of Mints.

Besides the sub-superintendents in charge of each one of the mints that is running, there should be a general superintendent in charge of them all. It should be his duty to see to the buying of bullion, to the general principles on which the mints should be managed so as to secure absolute accuracy in the minting of the coins, as regards the touch of the coins, excellence of workmanship, care of the materials, etc. He should also deliver the coins to the national bank, the treasury, or other agencies of the monetary commission, in accordance with the directions received from the monetary commission through the controller.

He should nominate the sub-superintendents of the mints to the controller for appointment by the monetary commission Presumably the present local managers and working force would be retained as far as practicable.

4. THE NATIONAL BANK.

The national bank, while doing presumably a large private banking business which would come to the profit of the stockholders, would also be an agent of the Government in connection with the monetary system and with other Governmental work. As its profits would be in part dependent upon the Government, and as it would do much Government work, it should divide profits with the Government and the Government should have a voice in the management.

(a) Powers.

Private.—(1) Discount or purchase of commercial bills of exchange. (2) Purchase and sale of gold and silver bullion and bonds. (3) Loaning money on the security of gold and silver coins, bonds, government bills, or other collateral. (4) Opening and conducting deposit accounts, including safety deposits.

Partly private.—(5) Issuing of bank notes convertible on demand into the new coins under Government law determining the new coinage. A special law should be passed determining the amount and character of the coin reserve for the bank notes, the regulations regarding their redemption, and other ordinary provisions of a law regulating bank-note issue; the right of issuing bank notes to be made a monoply of the bank as soon as practicable.

Public.—(6) Act as the chief agent of the Government in exchanging the new coins and notes for the old coins and moneys now in circulation under regulations made by the commission. For this work, of course, it would establish branches and numerous agencies. It would advise regarding the quantity and denominations of coins to be minted. (7) Act as agent for the Government in the administra-

tion of the gold-reserve fund in connection with the controller under regulations made by the monetary commission. The gold reserve to be held as government property on deposit with the bank and to be administered by the bank, not as its own funds, but under general regulations, as indicated. Exchange to be sold against this gold reserve only under the general regulations and with the cooperation of the controller, the bank selling its own exchange, of course, freely, without reference to the monetary commission. (8) Act as agent of the treasury in receiving and disbursing government moneys under regulation of the treasury, presumably receiving in its different branches Government moneys for deposit; acting as agent for the Government in paying Government salaries, etc. This work to include the administration of the debt obligations so far as it may be made practicable. This work done under the board of revenue, not the monetary commission, except regarding its own funds.

(b) ORGANIZATION.

The bank should be organized as a stock company for twenty-five or thirty years, with the liability of stockholders limited to the amount of their capital stock. The stockholders presumably private individuals. The capital presumably some forty or fifty million dollars of the new coins, one-quarter to be paid in before the bank begins business.

(c) OFFICERS.

(1) Five to seven directors, elected by the shareholders. The president and the vice-president to be chosen from among them. (2) One manager, Chinese, and one manager, foreign, to be elected by the directors with the approval of the Government, and to be given full power under the law laid down by the Government. (3) One auditor, to be appointed by the Government; one or two auditors to be elected by the shareholders. (4) Compradores, managers of branch banks, minor officers and assistants, to be appointed by the board of directors. (5) The controller of the currency, who is a Government official, to be a director of the bank ex officio.

The directors to be chosen for a period of five years, and to be so classified that one at least will retire each year.

The private business of the bank to be managed solely by the board of directors at their discretion. The public business to be managed by them under regulations laid down by the Government and under its careful inspection through the controller and auditor, and, if the Government wishes, also through an inspector to be appointed by the Government.

(d) BRANCHES AND AGENCIES.

The bank to establish branches in the leading commercial cities and to establish agencies throughout the country as rapidly as it is possible to extend the new monetary system, or wherever the bank finds it profitable for its own business.

The bank also in due time to establish its branches and agencies abroad. It may possibly be advisable at least for a time to make leading foreign banks its agents in connection with the reserve funds.

(*e*) The Management.

The management to be, in the main, in accordance with the customs of the leading foreign national banks. Reports of the exact condition of the bank to be published quarterly; reports to be made on demand at any time to the monetary commission. So far as the Government business in connection with the monetary system is concerned, the books to be kept in accordance with the rules laid down by the monetary commission on advice of the general accountant, and reports to be furnished him when asked for. Every effort to be made to secure public confidence by engaging well-known competent managers and by as great a degree of publicity of management as is practicable.

(*f*) Profits.

From the profits, dividends to the amount of 6 per cent to be divided among the stockholders. If there is a surplus beyond, 10 per cent of this surplus to be placed in a reserve fund until that fund amounts to 10 million dollars. Surplus beyond this to be divided into two parts between the stockholders and the state until the share of the stockholders amounts to 8 per cent of the capital. The remainder beyond that to be divided into three parts, one to the stockholders and two to the state.

X. REVISION OF TREATIES.

1. REGARDING THE IMPORTATION OF FOREIGN COINS AND OF BULLION.

In order to carry out successfully its monetary reform, it seems probable that China will need to arrange with the various treaty powers a revision of the conditions regarding the importation of foreign coins and of bullion, so that she may either levy a duty upon their importation or forbid their importation altogether excepting under Government instruction.

(*a*) Reasons for Checking Importation.

The reasons for the checking of importation are as follows:

(1) *To secure and keep one uniform system of coinage.*—So long as foreign coins are admitted free of duty, it is likely that the Mexican dollars, and especially the British dollars, will circulate freely in many parts of China, particularly in the coast cities. If the new coins remain on the silver basis and are substantially of the same weight as these other coins, there is no reason why the people should make any special discrimination between them, and it is not likely that they will take the trouble to do so. Indeed the reputation of the Mexican dollar, and especially that of the British dollar, are so well established that for a long time to come many would take them in preference to the new dollar.

If the new coins should be placed on the gold basis, very many of the Chinese would gradually come to prefer the new coins as more satisfactory for use, especially in the import trade and in all other cases where a fluctuation in exchange with foreign countries is detrimental. On the other hand, for the use of exporters who wish to buy material in the interior of the country, for those who have wages to

pay to the more ignorant classes among the people, and for many others, the cheaper coin would be considered more advantageous, and on that account the foreign coins would hold their own against these new coins for a long time unless special discrimination were made against them.

Of course the Government might discriminate against them by refusing to receive them for obligations due the Government and might deprive them of their legal-tender qualities, but even this discrimination would not prove sufficient to expel them from the country, and resort would probably be had ultimately, if that were possible, to discriminating taxation on contracts, as explained below.

Without stopping importation, therefore, it would seem practically impossible to carry out the provisions of the treaties which require the establishment of a uniform coinage.

(2) *To keep up the value of the silver coins by making them, relatively speaking, scarce as compared with the demand for them.*— One important influence toward maintaining the value of the silver coins, particularly if they are placed on the gold basis, is to see that the quantity of money in circulation is limited to the needs of business. If the Government is able to exclude foreign coins and bullion, it will be able, in case of a threatened depreciation of its new coins, to withdraw some of them from circulation by receiving them in exchange for drafts on its gold reserve, and then by retaining them in the treasury to create a relative scarcity of the money in circulation. If there is no checking of importation, any such withdrawal of coins from circulation would have little or no effect, since their place would be filled by coins from Hongkong, by bullion, etc. To insure the maintenance of the gold parity without too great a strain on the gold reserve, a checking of importation is necessary.

(*b*) When Regulate Importation.

The regulation of importation of these coins and of bullion should be placed in the hands of the Chinese Government. It is possible, however, that foreign nations now having the right to demand the free importation of these articles would not be willing to leave the regulation of their importation entirely in the hands of the Chinese Government. They would fear that such use might be made of the power that it would hamper business. In order to prevent such a result they will possibly insist that no restrictions be placed upon importation until a sufficient number of new coins are in circulation to prevent any undue scarcity of money. The determination of this point is somewhat difficult. Two methods have been suggested.

(1) *When fixed number coined.*—That treaties be negotiated declaring that as soon as China has a certain fixed number of the new coins in circulation the Chinese Government shall thereafter impose such restrictions as seem to it wise. So little is known, however, regarding the money actually in circulation in China and the amount actually needed for doing business that it is probable that great difficulty would arise in securing agreement upon the quantity needed. Many business men would think it preferable to leave the matter to be settled by some joint commission made up of representatives of the Chinese Government, Chinese business men, and of foreign governments and business men.

(2) *When special board agrees.*—It has been suggested, for example, that the power of restricting importation shall be exercised by the Chinese Government whenever the president of the board of revenue, the controller, and the managers of the national bank representing the Chinese Government, and authorized representatives of the Shanghai and Tientsin, English, American, and Chinese chambers of commerce shall agree by a majority vote that the proper time has come. It is possible that it would be wise to add to this committee the ministers of the foreign powers resident in Peking or a certain number of consuls, but it is probable that this would simply increase the difficulties and be of no advantage whatever. A committee representing the business men would probably be more satisfactory to other nations as well as to China.

2. METHOD OF NEGOTIATION.

In the case of the revision of the treaties one should consider where and how such treaties should be negotiated.

(*a*) IN CHINA.

If they were negotiated at Peking with the ministers of the foreign powers, owing to the desire of each minister to make as strong a record as possible for accomplishing much for his government, and to his natural desire to gratify his nationals and to secure more than do other members of the diplomatic corps, jealousies are likely to arise which make it difficult to secure satisfactory results.

Moreover, the authorities in the home governments, owing to their lack of knowledge of actual conditions in China, are likely to hamper very seriously the actions of their ministers resident in Peking and thus lead again to delay and difficulty.

(*b*) IN FOREIGN COUNTRIES.

For the reasons given above it is usually better for the Chinese Government to negotiate general treaties, requiring the agreement of several nations, in foreign countries, provided she can have the services there of men who are thoroughly well acquainted with the subject in hand. It is asked, therefore, whether it would not be better for China to send to the foreign countries to assist the Chinese ministers in making these treaties and in keeping them uniform, some representative Chinese who is fully in the confidence of the Government, together with some expert who knows fully the monetary situation in China and can explain with the greatest clearness to the foreign offices the exact needs of China and the benefit to those countries from acceding to her request. By such a method probably the best results would be reached most quickly.

XI. COMPARISON OF THE TWO PLANS OF STARTING THE NEW MONETARY SYSTEM.

Before undertaking any matter of so great importance as the reform of a country's monetary system, it is advisable to make very careful estimates of the cost and of the results. Unless this is done, mistakes are likely to be made which will prove very expensive financially and which may easily cause failure.

In the following comparison of the costs and results of the two plans, (1) that which starts with the silver coins given a fixed value in gold and (2) that which starts with the silver coins at their bullion value and later, after the accumulation of a gold reserve, raises them to a fixed value in terms of gold, it is assumed, for convenience of comparison and because the calculating tables make it more convenient, that the interest both paid and received is at 5 per cent, and that £1 sterling equals 10 of the new dollars. (At present £1 sterling equals about $10.11 Mexican.)

In actual practice the Government might probably have to pay from 5½ to 6 per cent on a loan, but if so it might possibly be able to invest also at somewhat above 5 per cent. Whether the figures in themselves are exactly accurate or not, the comparison of the two plans will be fair.

TABLE V.[a]

Beginning with a gold reserve:	
Borrow at 5 per cent interest	$40,000,000
Annual interest charge	2,000,000
Result at the end of five years:	
Amount of coins in circulation	200,000,000
Gold reserve on hand sufficient for the needs	67,000,000
To pay debt in five years requires in sinking fund annually	7,240,000
Annual interest charge	2,000,000
Total annual payment	9,240,000
Result at the end of ten years:	
Amount of coin in circulation	400,000,000
Gold reserve	107,000,000
To pay debt in ten years requires in sinking fund annually	3,180,000
Annual interest charge	2,000,000
Total annual payment	5,180,000
[Loan for thirty years; payment to begin after ten years.]	
Result at the end of twenty years:	
Amount of coins in circulation	800,000,000
Gold reserve	187,000,000
Annual expenses, first ten years	2,000,000
Annual expenses, second ten years	3,208,000
Annual expenses, third ten years	3,208,000
Total expense for thirty years	84,160,000
Total expense for first twenty years	52,080,000
Beginning with silver to accumulate gold:	
Result at the end of five years—	
Amount of coins in circulation	200,000,000
Gold reserve, as before	67,000,000
To raise $67,000,000 in five years, with money invested at 5 per cent and used for no other purpose, the annual payment is	12,127,000

[a] In these tables there have been used as the basis for the calculations the interest and bond tables of the Mutual Life Insurance Company, of New York. If other tables were used with more or fewer decimals, the results would be slightly different.

Beginning with silver to accumulate gold—Continued.

Result at the end of ten years—	
Amount of coins in circulation	$400,000,000
Gold reserve, as before	107,000,000
To raise $107,000,000 in ten years requires an annual payment of	8,506,500
To raise even $67,000,000 in ten years requires an annual payment of	5,326,500
Result at the end of twenty years—	
Amount of coins in circulation	800,000,000
Gold reserve, as before	187,000,000
Annual expense	5,647,400
Total expense for twenty years	112,948,000
To close the whole transaction in five years on the first plan there would be a yearly saving of	2,887,000
To close the whole transaction in ten years on the first plan there would be a yearly saving of	3,326,500
To close the whole transaction in thirty years as recommended, making payments on the principal of the debt the last twenty years, there would be a total saving, over merely raising a gold reserve, in twenty years of	28,788,000

Advantages of the first plan.—(1) The gold parity from the beginning, preventing the fluctuations from exchange and all losses to the Chinese Government in taxes, etc., from any fall in the price of silver. (2) The cost, on a ten-year basis, including the payment of the debt, less each year by $3,326,500.

It would probably be more convenient for China to borrow the money, to pay in thirty years, with the privilege of paying at any time after ten years, then for the first ten years to pay only the interest; that is, $2,000,000 annually. Afterwards the accumulations will probably enable the debt to be paid very promptly, or at any rate to be refunded at a lower rate of interest. If, however, it should be decided to carry the debt for the full thirty years, at the end of ten years the Government could begin accumulating money in a sinking fund. This would require an additional payment for twenty years of $1,208,000 each year. The result would therefore be that for ten years the Government would pay each year $2,000,000; for the succeeding twenty years it would pay each year $3,208,000. There can be little doubt, however, that as a result of the great benefits to the country of the new system the burden of these last figures could be very much lightened.

It should be borne in mind, too, that under the second system there would be all the fluctuations in exchange for at least ten years; that these fluctuations would probably continue for five years more, while the gold value of the coins is being established, and that during that five years there would need to be a complete readjustment of prices throughout the country, which would disturb business very decidedly. Under the first plan the only disturbance to business would be at the beginning for four or five years, and this would not be more appreciable than it must be anyway during these same five years in starting on the silver basis.

XII. TO BEGIN THE MONETARY SYSTEM ON A GOLD BASIS WITHOUT A LOAN.

1. AT SAME RATE AS WITH LOAN.

It has been suggested that if the new system were to begin on the silver basis, it might not be necessary to wait ten years before putting the silver coins on a gold basis. It might, perhaps, be done, it is thought, in three years or five years. It is not worth while to estimate carefully the relative costs of this procedure. If the system begins by issuing the coins at a fixed gold value, the gold reserve may begin very small and increase gradually in proportion to the number of new coins in circulation. If gold enough can be raised by the Government to change from the silver basis to the gold basis in five years, the system can be started on a gold basis without making any loan by raising the same amount of money in the same way; and at the end of five years, on account of the greater profits of the gold system, there will be on hand $33,000,000 more in a gold reserve than if the start is made on the silver basis. The figures to show this follow:

There must be raised each year $12,127,000 to accumulate in five years by a sinking fund $67,000,000, the smallest amount planned to change the new system to a gold basis at that time with 200,000,000 new silver coins in circulation. If there can be raised only $12,000,000 each year, it would be easy to start on the gold basis at once without making any loan.

Table VI.

First year:	
Coin	$40,000,000
Of this in small silver and copper coins	10,000,000
Silver which can be used to draw on gold reserve	30,000,000
Raise by taxation and place in gold reserve	12,000,000
Profits from coinage, at 20 per cent	8,000,000
Total reserve at end of first year	20,000,000

This is 66$\frac{2}{3}$ per cent of the amount available to draw on and will probably be ample.

Second year:	
Coin	$40,000,000
Total in circulation	80,000,000
Available for draft on gold fund, not over	70,000,000
Reserve already on hand	20,000,000
Raised by taxation during second year	12,000,000
Profits of coinage, at 20 per cent	8,000,000
Total reserve end of second year	40,000,000

This is 57$\frac{1}{7}$ per cent and ample for the second year.

Third year:	
Total circulation would be	120,000,000
Reserve	60,000,000
Fourth year:	
Total circulation	160,000,000
Reserve	80,000,000
Fifth year:	
Total circulation	200,000,000
Reserve	100,000,000

The reserve is, then, at the end of the fifth year $33,000,000 more than under the other plan at the end of an equal period, and is large enough so that by adding merely the annual profits of the coinage to the reserve, stopping after five years all further taxation for this purpose, it will be sufficient to protect the coinage for twenty years from the beginning, if the mints work at the same rate.

Besides this benefit there has been no disturbance of business as under the other system, which involves a change from silver prices to gold prices, and the same rate of taxation need be maintained a much shorter time.

It is probable that during the later years a less reserve might be needed than is indicated; but that fact would be still more to the advantage of the system which starts on the gold basis. Confidence is gained some years sooner and more gold is readily available to be put to other uses.

The advantage in this case, as in all the others, comes, of course, from the added coinage profit when silver coins are issued at a gold value.

2. AT SLOWER RATE THAN WITH LOAN.

It being considered by some inadvisable for China to make any loan in connection with the new monetary system, the following new estimates are given to show the probable cost of establishing the monetary system without a loan, in a cheaper, though not quite so rapid a way as with a loan.

It has been suggested by the monetary commission that China could probably raise 7,000,000 taels to start the new monetary system. In the following estimates it is suggested that 7,000,000 taels each year be raised for the first two years; thereafter 3,500,000 taels annually.

It is probable that after the sixth year the percentage of reserve could be reduced somewhat, so that quite possibly no further sums would need to be contributed by the Government for the further development of the system.

It is assumed for the purpose of maintaining whole numbers in the computations and for the purpose of keeping the estimates in dollars, so as to admit of more ready comparison with previous papers, that $1 equals 70 tael cents. Seven million taels then would equal $10,000,000.

For the first year it is assumed that half of this sum is set aside as a reserve and that half is used as working capital. For the second year and thereafter $10,000,000 is kept as working capital. By "working capital" is meant particularly the money used for the purchase of bullion and mint supplies.

No account is taken of the interest on the reserve. This could be used either to reduce the annual contribution from taxation or to increase the rate of coinage, thus insuring the more rapid success of the system. The main difficulty, of course, will be during the first two years, but it is not thought that these difficulties are by any means insuperable.

This plan would secure for China the fixed value in gold of the new coins from the beginning, it would save the high profit from seigniorage, and it would avoid any loan. The uprightness and skill required for the management would be substantially the same as in previous plans.

TABLE VII.

First year:	
Working capital	$5,000,000
Reserve	5,000,000
Coin	20,000,000
Profit to add to reserve	4,000,000
Total circulation	20,000,000
Total reserve	9,000,000
Second year:	
Working capital	10,000,000
Coin	40,000,000
Profit to add to reserve	8,000,000
In circulation	60,000,000
Former reserve	9,000,000
Add reserve from taxation	5,000,000
Total reserve	22,000,000
Third year:	
Working capital	10,000,000
Coin	40,000,000
Profit to add to reserve	8,000,000
In circulation	100,000,000
Former reserve	22,000,000
Add reserve from taxation	5,000,000
Total reserve	35,000,000
Fourth year:	
Working capital	10,000,000
Coin	40,000,000
Profit to add to reserve	8,000,000
In circulation	140,000,000
Add reserve from taxation	5,000,000
Former reserve	35,000,000
Total reserve	48,000,000
Fifth year:	
Working capital	10,000,000
Coin	40,000,000
Profit to add to reserve	8,000,000
In circulation	180,000,000
Former reserve	48,000,000
Add reserve from taxation	5,000,000
Total reserve	61,000,000
Sixth year:	
Working capital	10,000,000
Coin	40,000,000
Profit to add to reserve	8,000,000
In circulation	220,000,000
Former reserve	61,000,000
Add reserve from taxation	5,000,000
Total reserve	74,000,000

While the reserve seems small for the first two years, it should be kept in mind that the new copper and nickel coins, which might make a considerable part of the coins in circulation, would make little, if any, demand upon the reserve. Furthermore, the rate of coinage might be checked somewhat, if more time seemed advisable to secure confidence, and thus lessen the demand on the reserve.

XIII. COINAGE SPECIFICATIONS.

The following specifications regarding coinage are suggested as perhaps reasonable if it is decided to establish the new monetary system on the silver basis and to make the new dollar seventy-two one-hundredths of a K'up'ing tael, as the committee has proposed. It is quite possible that the specifications would be equally satisfactory if it

were decided to give the coins a fixed value in terms of gold, but in that case the matter should be discussed again fully before the coinage is begun. These weights are in decigrams, so as to make, generally speaking, whole numbers.

Inasmuch as the coins are ultimately to be given a value independent of their weight, it is inadvisable to refer to their tael weight, either on the coin or in the law. Moreover, the tael weight is not exactly known and uniform, so that it will be necessary for the Government to fix weights in grains or decigrams before the confidence of business men, native or foreign, can be secured and held. The metric system is followed here as the system most generally approved.

According to the treaty with Japan regarding the settlement of the war indemnity in gold, it was decided for that special purpose that the K'up'ing tael was 575.82 grains. This gives the weight of seventy-two one-hundredths of a K'up'ing tael as 268.65 decigrams. The silver standard, therefore, in the nearest divisible round numbers would be 268 decigrams. We had therefore suggested the following table:

TABLE VIII.

	Gross weight in decigrams.	Kind of alloy.	Amount of alloy.
One dollar	268.0	Copper.	0.1
Fifty cents	134.0	....do...	.2
Twenty cents	53.6	....do...	.2
Ten cents	26.8	....do...	.2

If it were thought not unwise to make the new dollar a trifle heavier than the present one (and there would be no objection to this if it were given a gold value), there would be an easier division if the dollar were to weigh 270 decigrams. In that case the dollar should be given a gold value presumably of some 55 cents American or 2s. 3d. English. Should silver rise much, it might be well to make the coin 60 or 62.5 cents American; or it might be thought best to give the new dollar a value of exactly 50 cents American (gold) or 2s. English and make the coin slightly lighter than the Mexican dollar, so that there would remain a coinage profit of 15 or 20 per cent, a sufficient margin, perhaps, for any probable rise in the price of silver bullion; but the question of exact gold value is not under consideration here.

TABLE IX.

	Gross weight in decigrams.	Percentage composition.			
		Copper.	Nickel.	Tin.	Zinc.
Five cents	50.0	75	25		
One cent	70.0	95		1	4
Half cent	35.0	95		1	4
Two mills (cash)	25.0	50			50
One mill	12.5	50			50

The legal limit of variation from these weights and degrees of fineness should be made to conform substantially to those of the leading countries.

XIV. FOREIGN EXPERTS FOR THE CHINESE MONETARY SYSTEM.

1. DIFFICULTIES OF TASK; REASONS FOR FOREIGNERS.

The successful organization and direction of a monetary system is one of the most complicated and difficult problems which any state has to undertake. The experience of nearly every state of Europe and of America shows that mistakes in such systems bring enormous losses in commerce and industry to the countries concerned, and that frequently such mistakes lead to commercial crises from the effects of which a country does not recover for several years. Moreover, they often leave a system permanently faulty.

The starting of a new monetary system in a country like China, with its enormous population, its great extent of territory, its incomplete methods of communication, and its mingling of foreign and Chinese business methods, is a task of especial difficulty, and this makes it of particular importance that no mistakes be made at the beginning. China should have the advice of some of the best experts in the world.

A few of these experts must at first probably be foreigners for the following reasons:

(a) Few Chinese Experts.

It seems to be the general opinion, Chinese and foreign, that, owing to her previous methods of doing business without a well-organized monetary system, there are at present no Chinese who have the requisite training and experience to undertake the task without foreign assistance.

(b) Need of Confidence.

Even if there were such Chinese at present, it is generally said that neither Chinese business men nor foreigners have the confidence in Chinese experts that is absolutely essential to the success of the new system, while they do have confidence in trained foreigners of reputation. As the system can not succeed unless the people give it their confidence, it is apparent that some foreigners of special ability and reputation should be engaged at first. The refusal on the part of the Chinese Government to engage such experts would certainly be interpreted to its discredit by some of the leading Chinese business men themselves, as well as by foreign business men and by foreign Governments. From what is often said by Chinese business men they might readily interpret such action as evidence of a lack of sincerity and of good faith on the part of the Chinese Government. They might even interpret it to mean that the Chinese officials undertaking the work had their own special profit in view rather than the benefit of the Chinese people.

2. RELATIVE NEED FOR EXPERTS UNDER THE TWO SYSTEMS.

Under which method of beginning the new monetary system are experts most needed?

(*a*) Under Silver System.

The system which starts with the introduction of the silver coins issued at their bullion value, with the intention of raising those coins within a few years to a fixed value in terms of gold, is, in the long run, the more difficult, and certainly requires as able experts as the other. Moreover, these experts are as much needed at the beginning of the system.

(1) Care must be taken that nothing is done, either in determining the form of the coins, their relative weights and relations to one another and to the coins already in existence or in their methods of introduction which will hamper the change to a gold system when the proper time shall have arrived.

(2) The problem arising from melting and exportation of many of the new coins, together with the old, will make it far more difficult to secure and keep accurate information regarding the conditions of the currency, so as to know when and how to undertake the change. There will be no melting of the coins under the gold system.

(3) A gold reserve must be gradually accumulated. The providing and managing of sources of revenue for this gold reserve and the due investment of it until a sufficient amount of it has been accumulated, requires much skill and discretion, else there will be a great waste.

(4) When business has once become adjusted to the new system of coins, and the present coins and sycee are largely out of the way, business men will shrink from the disturbance of business which another change is sure to create, and it will require great confidence in the controller of the currency on the part of the people and great skill on his part to select the right time to begin the change and to find the right methods to carry it through without arousing severe criticism and causing the greatest confusion in business.

(*b*) Under Gold System.

Under the system of starting with gold the main tasks at first will be the following:

(1) There will be the same care to be taken regarding the forms of the coins, the purity of the minting, etc.

(2) The problems of introducing the coins among the people, inasmuch as their value will not depend upon their weight, seems somewhat different from that in the other case and somewhat more difficult. In reality it is about the same. In both cases the Government must fix and must regulate from time to time, for tax purposes and for all Government business, the varying rates of exchange of the new coins for bullion silver, copper cash, the present dollars, etc. This must be done for all Government business. Private banks and merchants will make their own rates, but in practice they will accept mostly the Government rates. This difficult task must be met in ether case, whether the coins be given a gold value or not. It makes little difference to the people whether the rate for 1 tael is $1.31, say, under the silver plan or, say, $1.10 under the gold parity.

(3) Unless the Government can raise considerable revenue for the first four or five years it will be necessary to raise a small loan; in

fact, it will probably be much easier to raise the loan than to secure, under the first plan, the requisite revenue for the accumulation of a gold reserve by a sinking fund.

(4) Treaties with foreign powers regarding prohibition of importation of foreign coins, bullion, etc., must be negotiated in either case, but they would probably take effect first under the plan of starting on the gold basis. It is probable that they would be more readily secured from foreign governments under that plan.

3. EXPERTS NEEDED ESPECIALLY AT BEGINNING OF SYSTEM.

The experts are needed especially at the beginning of the system.

(a) Making Plans is Difficult.

The making out of the detailed plans regarding coinage, the introduction of the system, organization of the bank, rules for minting, etc., and the organization of the whole of the working force is by far the most difficult part of the problem. After the system has been thoroughly organized and has been running well for a few years much less expert knowledge will be required.

(b) Making Plans Most Important Part of Work.

The first work, as may be judged, is not only the most difficult part, but it is by far the most important part of the work, inasmuch as it involves the making of far-reaching plans which are to affect the welfare of every person in the Empire for many decades to come.

When a battle ship is to be built or a great manufacturing establishment to be organized the experts are called in at the very beginning to make the detailed plans.

(c) Mistakes at Beginning Often Irreparable.

Mistakes in making the plans at the beginning are usually irreparable, and even if not absolutely irreparable it will prove exceedingly expensive to change to a better plan. Few countries in the world to-day have monetary systems that they consider perfect on account of mistakes that have been made in the beginning which it has been impossible thereafter to rectify.

Consider again the difficulty of remodeling a battle ship half built on wrong plans made by a poorly trained naval architect, or of a great factory building poorly planned for the machinery which is to be used and for the work to be accomplished.

4. SELECTION OF EXPERTS.

The Chinese Government will do well to be cautious in employing foreigners, but it should be remembered that the Chinese Government selects the foreign experts not as its masters but as its trained workmen.

(a) For Ability and Fitness Only.

Experts should be selected only for their ability and for their fitness of their positions. The Chinese Government shoud not give any person a position to please a foreign government, or because he has paid for that position, or merely because he is a friend of China's. While he must be friendly to China and devoted to her interests in his business, he must first of all be an expert who knows his business thoroughly. He should also, of course, understand as fully as possible Chinese conditions, but it is far easier in China for a thorough expert to become posted regarding Chinese conditions than for a person knowing Chinese well, but not an expert, to become an expert.

(b) Contracts Definite.

Contracts should be made with the experts which are perfectly definite.

(1) *As regards time.*—It is probable that it would be well to engage these experts for a fixed period of not over five years, with chance of renewal of contract, with the right to discharge them at any time in case they prove inefficient or in case they exceed their powers.

(2) *As regards powers.*—The contract should be perfectly explicit regarding the field of work which the expert occupies. While he should be given much discretion in his special field, an attempt to control matters outside of his field without a new contract in which the Chinese Government joins should be sufficient cause for his prompt discharge.

(c) Associate Chinese with Experts.

Associate with the three or four leading experts Chinese of ability appointed to prominent positions, who may know all of the details of the work of the expert and themselves become expert. They should not be given power to hamper the work of the expert, as he must take the responsibility under the monetary commission; but they should have the right to know everything that he does in his work, to make suggestions, to give him information regarding Chinese conditions, and to aid in directing the Chinese employees.

(d) Establish Training School Under Experts.

There should be established under these experts schools in which should be trained in this special field of work Chinese to take positions in the department as the work develops.

The way to get rid finally of the foreign experts is by training men who, from their training, experience, high character, and the confidence of the business community, are fitted to take their places. A failure or serious mistake in the establishment of the system in the first place, through neglect to secure in time competent expert assistants, would seriously discredit the Chinese Government, and would have the normal result later on of forcing into the Chinese service more experts, and that, too, for a longer time than would come from a selection of a few of the very highest grade at the beginning.

XV. SUMMARY OF POINTS IN CONNECTION WITH THE CHINESE MONETARY SYSTEM.

1. COMPARISON OF TWO SYSTEMS.

It has been proposed by the Government to start the monetary system on the silver and afterwards to change to the gold basis. It has been proposed by the American commissioner to start the system with silver coins which have been given a fixed value in gold from the beginning.

The difficulties of the introduction of the system are substantially the same in degree in either case, although the difficulties are in some respects slightly different in kind. In either case the same amount and character of foreign expert help would be needed.

(*a*) The same care must be taken regarding minting of the coins.

(*b*) The same skill is required in the establishment and management of the national bank, although its work would be slightly different in kind in the two cases.

(*c*) The same skill and care is requisite in keeping the accounts and collecting statistics, which are absolutely essential for intelligent management under the two systems. Inasmuch, however, as under the silver system coins are much more likely to be melted down than under the system of gold parity, it would be absolutely impossible to have the same accuracy and knowledge under the silver system that could be secured under the gold.

(*d*) The difficulties of securing the coins among the people are practically the same in the two cases, although it is usually thought that the difficulties are much less under the silver system. That would be the case if China had a fully developed coinage system now, so that the only problem was that of exchanging one new coin for another old coin, as in the Straits Settlements. If those two coins could be exchanged at par it would be easier than to exchange the old silver coins for one given a gold value 15 or 20 per cent higher, so that, say, only 80 cents of the new coin would exchange for a dollar of the old. The present problem in China, however, is not at all of that nature. This is a point which has been often overlooked, and this mistake has led to mistaken advice which, if followed, will cost the Chinese Government and the Chinese people many millions of dollars and serious disturbances in business.

The great bulk of the business in China is done with silver bullion and copper cash. In consequence the Government is compelled, even if it introduces the new silver coins on the silver basis, to give to them an official rate of exchange in terms of the various taels in circulation. For instance, if the new coin is made to weigh seventy-two hundredths of a K'up'ing tael, when the coin is introduced into Peking the Government would fix the rate of exchange with the Kungfa tael. The Government in posting the official rate would probably say, therefore, that it would receive in payment of taxes instead of a tael $1.30 or $1.31 of the new coin. In case the dollar had been given a gold value, the notice would be that for each tael it would receive $1.10 or $1.12 of the new coins, depending upon the rate established. In the interior where the people are entirely unfamiliar with coins of any kind, they would take the new coins on the gold basis at, say, $1.10 or $1.12 for the tael about as readily as they would if the coins

were on the silver basis at, say, \$1.30 or \$1.32. In the treaty ports, where the people are accustomed to the Peiyang or Hupeh dollars, it may be that a new dollar which should pass exactly at par with them would have temporarily a slight advantage. Taking China as a whole, however, the difficulties of introduction are substantially the same on the gold as on the silver basis, provided it is clearly explained that the Government always receives the new coins at their published gold value and that the people have the chance to see that this is done when they pay their taxes.

(*e*) The difficulties after the first introduction, at any rate, are much greater, immeasurably greater, if the start is made on the silver system. With the start made on the gold system, when the coins are once introduced the difficulties are over. With the start on the silver system, when the coins are introduced they are given a silver value. When, some years later, it is proposed to change to the gold basis, the people are told that the dollar, which they had supposed was the standard, is no longer the standard; that it is not as good as it ought to be, and that the Government, therefore, proposes to give it a higher value. Whereas before it was received at 72 tael cents, the Government now will receive it at 74 cents, then at 76 cents, then at 78 cents, and so on, until it has reached the value decided upon, say, 92 tael cents. This process of gradually raising the value, by the Government changing its rates for receiving it and selling gold in exchange for it at these rates, must cover a period of several years, otherwise it will lead to the greatest speculation and to the hoarding of the coins to make the profit when the sudden change is made of adding 15 to 20 per cent to the value of the coins; and this would probably cause a commercial crisis.

On the whole, then, the difficulties of establishing a gold exchange system from the beginning are very much less than if the system, established on the silver basis, is afterwards to be changed to gold.

2. EXPENSES COMPARED.

The expenses of establishing and carrying out the system are very much less if one starts with gold than if one starts with silver and afterwards changes to gold. Other papers of these memoranda, giving the comparative cost of the two methods, make this clear beyond all possibility of dispute.

3. METHOD OF STARTING SYSTEM.

Either system should begin in a small way, especially perhaps the system with a gold parity. One province, preferably Chili, should be selected first. As soon as there is a suitable amount of coins on hand the Government should decide that it would start the system in Peking, say, and a sufficient quantity of the new coins of the various denominations for use in that city should be provided. The people would be notified that the Government would exchange these coins free of charge at certain published rates for their provincial coins—sycee and copper coins—and a suitable number of agencies where these exchanges could be made would be provided. It would then be declared further that at a certain date in the future, which would be named, all local obligations due the Government in cash must be paid

in the new coins. This would include the octroi and small fees of all kinds, and the Government would establish exchange shops near the stations where the chief payments are made, so that the people could, without trouble, exchange their sycee and copper cash for the new coins at fixed legal rates. Of course for a time taxes payable in kind would remain as before.

As soon as the number of coins minted had increased, the same plan would be followed in Tientsin, then, say, in Pao Ting Fu, etc., as rapidly as the new coins could be supplied and organization could be made throughout the province of Chili. The Government would, of course, agree from the beginning to receive these coins at their fixed gold value anywhere in the Empire for obligations due to it, provided the people wanted to present them. It would compel payment of obligations in these new coins only gradually as it had a sufficient supply for the local market on hand and had provided exchange shops in reasonable numbers for the people. Of course when these arrangements were made in the larger places, the merchants would soon take the coins at the regular value in the villages and elsewhere, so that in a comparatively short time the change would be made from one money to the other without any special intervention on the part of the Government.

As soon as the Government began insisting upon the receipt of these coins in obligations due itself, it would also begin paying out these new coins in the payment of salaries, for supplies, etc., paying them out at the same rate at which it received them. Following the province of Chili would come, of course, the province of Kiangsü, for the sake of Shanghai, Kwang-tung, Hupeh, etc. No pressure, anywhere, would be brought upon the people to take these coins excepting to pay their obligations due the Government, and that would be done simply to accustom the people to their use, and such complete exchange arrangements would be made that there would be no hardship.

4. LOAN AND SECURITY.

A small loan, say of about 40,000,000 of the new dollars, or a little more than £4,000,000, would doubtless be the most convenient way of securing money for the new system, though a loan is not necessary if the annual revenue can be increased somewhat for a few years. From careful discussion of this matter with people who are accustomed to making loans there seems little doubt that China could make a loan at a reasonable rate of interest, possibly on the security merely of the gold reserve and the stock of coins on hand in the management of the department, with the added guaranty of the loan by the Chinese Government. It would doubtless be better, however, in many ways for the Government to supply another basis for the loan, such as, say, the receipts of an opium farm in Shanghai, Canton, and one or two other cities, and to keep the gold reserve to be used as a special security in case an emergency should arise. However, the ability of China to make the loan on reasonable terms is clear. The advisability of making a loan is a suitable subject for discussion, and, as has appeared, China is probably able to start the system without a loan if it is thought best to do so.

5. ENGAGEMENT OF EXPERTS.

It will be necessary, in order to secure the proper skill in management, and especially to secure confidence on the part of business men, both Chinese and foreign, that a few of the very best foreign experts be secured, especially for a few years at the beginning of the system. These experts would, of course, be under the Chinese Government. Their fields of labor would be rigidly defined in their appointments, so that the Chinese Government would take no risk of their usurping power unduly; but within the field of work assigned them they would need to have much discretion left them, inasmuch as the work is very difficult and almost from day to day must be adapted to the changing needs. Foreign governments consider the establishment of their monetary system one of their most difficult problems.

The experts chiefly needed at first would be a controller in general charge of the whole system, whose business it should be to plan out the details of the work and the new laws needed, the putting of those laws into force, the direction of the general organization of the system, and its gradual introduction throughout the country, and the direction of its management. He should nominate to the Government for its appointment (*a*) a general superintendent of all of the mints. This man should be thoroughly acquainted with all foreign methods of mint management and be well known, so that his name would be a guaranty to everyone of the absolute honesty of both weight and touch of the new coins, and should also be a guaranty to the Government that the work was being done at the lowest possible cost.

(*b*) *An accountant or statistician.*—It is necessary that all the mints and different agencies for the introduction of the system should keep their books in harmony, so that from month to month—almost from day to day—the controller can learn the exact condition of the mints as regards supply, the rate of exchange, the amount of money, silver, etc., on hand in each of the agencies for the introduction of the money throughout the country, the condition of the national bank, and its reserve, etc. The accountant, therefore, must have authority to collect this information from the various sources, and to compel them to keep their books in the ways which he prescribes. He should be the medium through whom the information needed by the controller should be gathered, and he should publish reports regularly.

(*c*) The national bank should be organized under a special law prescribing strictly its powers and duties, so that the Government would be protected absolutely as long as the law was observed. Still further, the controller, a government official, would be ex officio a director of the bank, so that he should know the conditions and details of the management of the bank. The Government should also appoint auditors and inspectors to see that the bank kept within the law. The chief foreign manager of the bank should probably be selected by the board of directors elected by the stockholders, but his election should be approved by the Government on the recommendation of the controller. Inasmuch as the bank has so much Government work to do, and inasmuch as it must be run in harmony with the new monetary system, it is necessary that its manager and the con-

troller work in the closest harmony. Possibly it would be best to have the manager of the bank appointed by the Government on the nomination of the controller; but probably the way first suggested would be best.

6. CONTRACTS WITH EXPERTS.

With these foreign experts the Government should make rigid contracts, so that there could be no dispute as to their field of work, and the Government should in those fields give them practically full power. They should not be allowed to exercise authority outside their special fields of work.

It would be well for the Government to place with these foreign experts, who, it should be kept in mind, are skilled workmen and advisers employed by the Chinese Government and not in any sense its dictators, Chinese who are willing to make this kind of work their business, and who, as understudies, will know all the work of the foreign experts and will assist them in every way possible. To a considerable extent, in connection with the foreign experts, they will take charge of the Chinese subordinates who are employed; but care must be taken, especially during the first years, that they do not hamper the work of the experts.

The controller should also start a training school to run for some years until he gets a good many well-trained young Chinese to take positions in the monetary system in the provinces.

7. RELATION OF FOREIGN GOVERNMENTS.

In securing these experts the Government should not in any way accept the dictation of any foreign government. Men should be selected for their knowledge and ability to do their work, and for this only. The banker should doubtless be one of the most experienced and ablest foreign bankers who have done business in the East for the last few years and one who has the confidence of every one. The controller should be a man who knows monetary science and monetary systems thoroughly, who has had experience in establishing and administering foreign systems, and whose reputation will give confidence to business men, Chinese and foreign. The same thing should be said in their respective fields with reference to the superintendent of the mints and of the accountant. The accountant should be, if possible, one who knows the Chinese language thoroughly and Chinese ways of doing business. Presumably the chambers of commerce might be consulted to advantage by the controller in securing the names of two or three of the leading men from whom the accountant should be selected by the monetary commission. Presumably some one of experience in the Imperial customs service would be the right man, although possibly some one of experience in private business might be better equipped.

After the first few men are selected there will be little difficulty in getting their subordinates. For branch banks, etc., the board of directors, with their manager, would, of course, control; for the more directly subordinate Government positions the controller would, of course, name (nominate, not appoint) the men; in the mints, practically in accordance with the wishes of the superintendent of the

mints; in the accounting department, at the suggestion of the chief accountant, and so on. In the establishment of the new monetary system in various places the inspectors necessary would, of course, be more directly the personal subordinates of the controller. The main difficulty is in getting the right start with the right men; thereafter the system will develop easily.

XVI. GOVERNMENT PROCEDURE.

In the establishment of the new monetary system it is important that the Chinese Government arrange soon a plan for its general lines of work, so that the whole system may be developed in an orderly manner without mistakes. So long as the new coins are not put into actual circulation there will be relatively little harm done by a delay of a few weeks, or even of a few months, after the first steps are taken, so as to permit the definite formulation of plans. If the new coins are put into circulation before the plans are practically all worked out, it may do great harm, since there will be great difficulty in making any changes thereafter.

The following indicates the chief lines of activity which the Government must follow in the comparatively near future. So far as possible the order in which action should be taken is indicated.

1. THE APPOINTMENT OF EXPERTS.

(*a*) The Controller of the Currency.

Inasmuch as the controller of the currency will be held responsible by the Chinese Government for the success of the system, and inasmuch as it will expect to rely to a considerable extent upon his judgment in making plans for the organization of the system, his appointment should be made as soon as the Government can find a satisfactory man. This is equally necessary whether the system starts on a gold or on a silver basis. It is merely good business policy to put the responsibility upon some one individual to whom the Government can apply at any time for suggestions, from whom it can demand reports, and with whom it will expect to counsel regularly regarding the development of the system. No other plan would be in accordance with good practical business methods.

Inasmuch as he is to be held responsible for the successful and harmonious working of the system, the other chief officials to be appointed by the Government should have their names suggested to the Government by the controller. In that way only can it be certain that friction, which might be dangerous to the success of the system, will be avoided. The Government should, of course, indicate to the controller certain general matters in connection with these appointments if it wishes to do so, such as the nationality of the appointee which would be preferable, if it has any preference, the general type of man desired, etc. The two appointments (aside from a secretary or an assistant) that should probably be made first are:

(*b*) General Superintendent of Mints.

This appointment should be made comparatively soon, inasmuch as under the general management of the superintendent, in accord-

ance with directions issued to him by the Government through the controller, should be made the inspection of all the existing provincial mints, the inventory of their machinery, so as to bring out their capacity, the profits which they can make, etc.

There should be ascertained also, either by the general superintendent or by officials acting for the controller, the profits which have been made by the mints of late years. The superintendent should inquire likewise carefully into the skill and trustworthiness of the present managers and also regarding the most responsible workmen. The information indicated above is necessary in order that just and satisfactory arrangements can be made with the viceroys for the transference of their mints in due time, and for the satisfactory working under the new system of the mints when they are once taken over. As the general superintendent of mints will be held responsible for every ounce of silver or gold placed in his hands, he must have a voice in selecting his subordinates—so far as is possible from those now working. He should be consulted also regarding the edicts that will need to be passed in connection with the work of the mints.

(c) General Accountant.

It is not necessary that this appointment should be made immediately, and still there should not be too long a delay, inasmuch as the accountant should prepare beforehand, on consultation with the controller, so as to be sure that the whole system is understood alike by them both, his plans for uniform accounting in all of the mints, his forms for the reports on public business of the national bank, as well as for the various offices for the distribution of the coins, etc., throughout the Empire. He will need also to have furnished him, as the basis of the accounts of the entire system, the inventory of the material in the existing mints, the values of the machinery, mint buildings, etc. Such preparation before the actual work of the system begins will require considerable time.

2. CONTROLLER TO PREPARE AND SUBMIT DRAFTS OF EDICTS.

The Government should instruct the controller to study carefully with the superintendent of mints, the general accountant, and others, then to prepare and submit for its consideration and action, as soon as it can be satisfactorily done, drafts of edicts on the following subjects:

(a) General Currency Law.

A general currency law, which shall prescribe in outline the organization of the system.

(b) Minting Law.

A minting law giving (1) a description of the coins to be issued; (2) the limit of variation in weight and fineness of the coins to be issued; (3) regulations regarding inspection of coins, purchase of bullion, the issue of coins, etc.

(c) Gold-Reserve Law.

An edict creating a gold-reserve fund and establishing general regulations for its management.

(*d*) Banking Laws.

(1) A law for the establishment of a national bank. (2) A law regulating the issue of bank notes.

These edicts should be drawn with the greatest care. A variation of one decigram in the weight assigned to the gold standard coin would make a difference of more than $20,000,000 probably in five or six years.

It is not necessary that all of these edicts be passed immediately, but they should be prepared by the controller as rapidly as they are needed, for submission to the monetary commission in ample time for full discussion of them by the commission with the controller before they need to be issued.

3. REGULATIONS REGARDING LOANS.

If it is decided to make a loan in order that the new coins may be issued with a fixed value in terms of gold, it is desirable that steps be taken soon in connection with that matter. (*a*) The question of proper security for the loan and provision for the payment of the interest and in due time of the principal should be considered. (*b*) Negotiations should be entered into to secure the loan on the best terms by securing offers from various parties to see who will offer the best terms.

4. REGULATIONS REGARDING REVENUE.

If it should be found that a loan is not necessary, provisions will still need to be made very soon to secure the revenue requisite from the beginning either for the proper development of the system with the coins on a gold value or for the rapid accumulation of a gold reserve.

5. MODIFICATION OF TREATIES.

Steps should be taken in the near future for negotiating amendments to the treaties with foreign powers so far as they are necessary for limiting the importation of foreign silver coins and bullion.

These measures will perhaps not be needed for a considerable time, but there is likely to be much delay in securing the consent of all of the treaty powers, and when it does become necessary to limit the importation of silver coins and bullion, it would be a great misfortune if that step could not be taken promptly.

With certain powers it might also be desirable to discuss informally the question of their attitude in the future toward taxation on business conducted in any currency excepting the new currency. For these measures a monetary expert will be needed with the Chinese treaty commissioners.

6. ORGANIZATION OF NATIONAL BANK.

The Government should also instruct the controller to suggest steps in due time for the organization of a national bank and for beginning business with it. It is not absolutely necessary that the bank be started at any fixed time, but it would probably save some money to the Government, and it would certainly be desirable, if it is practicable, for the bank to be organized so as to begin business by the time

that the new coins are issued. It would, of course, be an advantage if the bank could be started almost immediately, so as to have its buildings ready, its corps of assistants engaged and somewhat accustomed to their work, and some patronage already secured for the private business before it became necessary for it to take up its public business.

In suggesting to the monetary commission the draft of the law for the establishment of a national bank, the controller would, of course, suggest methods of securing capital, organizing the bank, etc., and he should be ex officio a director of the bank. The manager, elected presumably by the directors, should be subject to approval by the Government on his name being referred to it by the controller.

It will be noted in the outline above that the entire power and control rests with the Government, but that an organization is indicated so that it can receive continually from the controller, and through him from each one of the subordinate officials, suggestions regarding the details of organization, of management, of appointment of suitable men, etc. The Government will, of course, view these suggestions carefully, and, finally, after full and careful discussion with the experts appointed, so that there will be no misunderstanding, the Government will take action. So far as possible its control will be largely in the form of these general edicts and a careful inspection to see that these laws are rigidly observed. The contracts made with the experts would, of course, prescribe strictly their powers and duties, and they must confine their activities to those fields. Within those fields they should be allowed much discretion.

It is only through this method of centralizing responsibility in the controller and of dealing with the details of the system through the heads of the different departments and eventually through the subordinates, each of whom is to be held strictly responsible by his immediate superior, that the Government can secure absolute certainty of results and absolute confidence on the part of the public, both Chinese and foreign.

It would be understood, of course, from the beginning that the whole system is to be managed on the strictest business principles and solely in the interests of China.

XVII. SECOND SUMMARY; ANSWERS TO OBJECTIONS, AND FINAL SUGGESTIONS.

1. SUMMARY OF WORK OF EXPERT ORGANIZER.

The Chinese Government needs foreign expert help of the nature suggested in our previous discussions, substantially as much if it should decide to issue merely a silver coinage without giving that coinage a gold value as if it attempted to establish a gold system. The difficulty connected with foreign experts, therefore, can not be avoided by rejection of the American plan, and in addition to this consideration its rejection means also, of course, the loss of the 20 per cent profit, the disadvantage of not securing a stable rate of exchange with gold, and the many other disadvantages of the silver system mentioned. The expert will be needed on the silver basis for the following reasons:

(*a*) To fix the ratio to the tael at which the Government will accept the new coins in various parts of China when it is introduced.

(*b*) To see that the mints turn out coins of standard weight and quality, and to give the people confidence in them. At present this is not universally the case with any mint in China. Objections from business men have been heard against them all.

(*c*) To organize and manage the distribution of the new coins and the purchase of the old coins and of bullion. Unless this is skillfully done the old coins will remain in circulation indefinitely and the new coins will have great difficulty in making their way.

(*d*) He should advise regarding laws to be passed discouraging the circulation of old coins and of bullion.

(*e*) He will be needed in the arrangement of treaties permitting the prohibition of importation of the old coins and of bullion.

(*f*) His care will be needed in the detailed arrangements to keep up the value of the smaller silver and copper coins.

(*g*) The coinage of the present copper ten cash pieces should be stopped very soon. He should be consulted regarding that.

(*h*) He should make estimates regarding the taking over by the board of revenue of the provincial mints.

There are other points which might be mentioned, but this is enough to show that an expert of the first rank is needed even if the gold system is not attempted.

2. DELAY INADVISABLE.

With the new mint approaching completion, part of the machinery already being on hand, there can not be any long delay in reaching a decision without considerable loss to the Government. Nevertheless it would be far better to delay the issue of the new coins for a year or more, losing the interest on the capital in the mint, than to make a wrong start from the ill effect of which it might be almost impossible ever to recover.

3. OBJECTIONS TO SYSTEM ANSWERED.

No objections have been raised to the gold exchange system which have not been satisfactorily answered, to some people at least who have taken the time for full consideration. In a few words are summed up below some of the most important objections and the line of answer. There is no doubt that all objections can be satisfactorily answered.

(*a*) People too Ignorant.

It is said that the Chinese people are too ignorant; not ready; can not understand the new system.

No people in any civilized country understand the details of the monetary system; it is not necessary that they should. Most people send telegrams without understanding the process; they ride on the railroads without knowing how to run an engine; they take bank notes, knowing nothing of the reserve. In one week they can be taught that the Government will take the new coins at a fixed valuation; that they can always get a thousand of the new cash for the new dollar, or a new dollar for a thousand of the new cash, and that they need no longer be dependent upon the cash shops to learn the

value of their money. This alone will secure the hearty support of the common people, and it is not really necessary that they understand more.

The merchants and business men with whom I have had an opportunity of discussing the matter thoroughly have practically all supported it heartily. The one or two exceptions were simply in doubt as to whether it were not better to keep a silver system with its fluctuations. I am convinced that those who favor the gambling risks in business coming from the fluctuating rate of exchange of a silver system are relatively few.

To urge that China must wait until her people are educated would seem to argue simply a wish to avoid responsibility.

It might be well for the new controller to visit some of the leading cities before the system is introduced and explain it in some detail to leading business men.

(b) China Has No Gold.

It is said that China has no gold. China can buy gold as easily as she can buy machinery. Moreover, it is as cheap for her to buy gold with her present products as it is to get it by mining or in any other way.

(c) Foreigners Will Not Receive New Coins at Gold Value.

It is said that foreigners will not take the new coins in the settlement of debt obligations. The new coins can not be sent abroad at their gold value, it is true, but the new coins can buy at their gold value bills of exchange with which to settle the foreign debts, and that is far better than to send the coins themselves abroad; in fact, coins are not sent abroad now.

(d) System Will Benefit Foreign Nations.

It is said that it will benefit the foreign nations at the expense of China.

Foreign nations are benefited only in their foreign trade with China. China will herself benefit from the new system as much as all the foreign nations put together, for her trade with all of them is equal to their trade with her, and she benefits from the foreign trade as well as they do. The Chinese are too shrewd to do business in which they do not make a profit.

Besides China's enormous added gain from a good system in her foreign trade, her domestic trade would also be very greatly improved if there were one system of uniform coins of fixed value throughout the empire. Moreover, a stimulus to foreign trade in itself gives a great stimulus to the internal trade. Most export goods change hands more than once in the interior. Railroads are building in many parts of China. These can work to advantage only with a fixed money. It would be practically impossible to use taels with a large traffic, and there will be grave disadvantages to the Chinese people until there are fixed gold values. Railroads will always take advantage of the fluctuations in exchange at the expense of their patrons.

(*e*) CHINA CAN NOT MAINTAIN VALUE OF COINS.

It is said that China can not maintain the gold value of her coins. It has been made clear repeatedly that this can be done without difficulty.

(*f*) WILL DRIVE CASH SHOPS OUT OF BUSINESS.

It is urged that it will drive the cash shops and others out of business. It is doubtless true that some few people, especially keepers of cash shops, will be injured in their business by the new system. That will be equally as true with a good uniform silver system as with gold. It is inevitable that a few suffer from any industrial change. Where one suffers a hundred will benefit.

(*g*) EXPORTERS WILL NOT GAIN FROM RISE IN GOLD.

It is said that the exporters will not gain if there comes a rise in gold. True. Neither will they lose if gold falls. It takes away the gambling element from business—a most desirable thing.

(*h*) FOREIGN EXPERT NEEDED.

It would require foreign expert help, and some object to that. So will the new silver system, and in any case it has been made clear that the foreigners would be here as skilled workmen of the Government and its advisers, but not in any sense as its masters.

Most of these and other objections are due either to a misunderstanding of the system or to the fact that the Chinese edition of the earlier pamphlet did not make clear the plans. The more detailed explanations here will doubtless clear up many difficulties, and further details can easily be supplied.

4. AN EXPERT CAN MODIFY HIS PLANS TO SUIT SPECIAL NEEDS.

It should be kept in mind, also, that an expert who knows his business fully can probably modify, more or less, some features of a plan to meet special objections while retaining the chief points.

It will be recalled, for example, that several modifications of the original plan were suggested so that China could start a system without a loan by raising considerably more money for the first few years. Other modifications could be made with reference to certain details regarding foreign experts, or with reference to the rapidity of introduction, etc., if it should be necessary, although the substantial features of the plan suggested would remain.

5. SUCCESS SURE IF PLANS ARE WELL MANAGED AND SUPPORTED.

On the Chinese Government, of course, rests the responsibilty of the rejection of plans which, if they were successful, would mean a saving of very many millions of dollars to the people, besides an added prosperity which would count for far more than the millions of dollars saved.

To that Government, on the other hand, would come also chiefly the satisfaction of a great service rendered and the gratitude of the peo-

ple for many generations to come if there is introduced and made successful a system which would be of so great benefit.

From long study of this subject, from helping establish other systems, and from its experience in seeing similar systems at work in other places, the American Commission counts upon the full success of the system recommended, if it is well managed and if it is properly supported by the Chinese Government.

III. COMMENTS AND SUGGESTIONS ON THE CHINESE MONETARY REFORM.

1. MEMORANDUM ON THE ESTABLISHMENT OF A GOLD-STANDARD CURRENCY IN CHINA.

By Alfred E. Hippisley, Commissioner of the Imperial Maritime Customs, adviser to Chinese Treaty Commissioners.

NOTE.—The following memorandum was drawn up in compliance with a request from the imperial commissioners for treaty revision. Their excellencies Lü Hai-hwan and Shêng Kung-pao, for an expression of the writer's views with reference to the suggestions contained in a pamphlet, "Memoranda on a New Monetary System for China," presented by Prof. J. W. Jenks, the commissioner appointed by the United States Government in response to an appeal made to it in January, 1903, by China and Mexico, for assistance in establishing a monetary system which should determine the relations between silver and gold. As the views of a layman on the technical points involved in such a proposition would be of little worth, the writer confines himself to an expression of opinion as to the manner in which the Government and the people of China are likely to be affected by the establishment of a gold-standard monetary system.

On January 22, 1903, the Chinese chargé d'affaires at Washington addressed an official request to the United States Government to use its influence in establishing an equilibrium between gold and silver. He said:

"The serious results which are threatened by the recent fluctuations in the value of silver bullion to the commerce both of gold and silver-standard countries have induced the Chinese Imperial Government, acting in consent with the Mexican Government, to ask the cooperation of the United States in seeking a remedy for these conditions for the mutual benefit of all concerned. Safe and profitable trade between any two countries is dependent to a considerable degree upon relative stability in the value of their currencies. This stability is destroyed in the trade between a gold-standard country like the United States and a silver country like China, when the variations in the gold value of silver, as was the case in the year 1902, reached nearly 10 cents an ounce in gold in a single year, or nearly 20 per cent upon the price of silver bullion. * * *

"It is not the expectation nor the wish of the Chinese Government that the gold standard countries should take any action tending to impair their own monetary standards or to make material changes in their monetary systems. It is desired that the governments of gold

countries having dependencies where silver is used and the governments of silver-using countries shall cooperate in formulating some plan for establishing a definite relationship between their gold and silver moneys, and shall take proper measures to maintain such relationship. One such plan, it is reported, has already been proposed in both Houses of the Congress of the United States with reference to the Philippine Islands. It is this, and other plans designed to accomplish the same end, which the Government of China would be glad to have considered by the United States and other governments, with a view to the adoption of the best attainable monetary arrangement by those countries which are not prepared under existing conditions to adopt a currency system involving the general use of gold coins. The cooperation of the United States with the Chinese Imperial Government and with the Republic of Mexico in presenting this subject to other governments would, in the opinion of this Government, aid greatly in securing a prompt and satisfactory solution of an enormous problem which threatens the ruin of the silver-using countries on the one hand in the vain effort to meet increasing gold obligations abroad, and which threatens also the commercial prosperity of the gold-using countries by destroying the purchasing powers of their customers."

MEANING OF CHINA'S REQUEST TO THE UNITED STATES.

This was practically a request from the Government of China to the United States to devise a new monetary system which would establish a fixed rate of exchange between China and gold-standard countries; because if China made no change in her system the existing evils resulting from constant fluctuations in exchange between gold and silver detailed by the Chinese chargé d'affaires would continue, even if they were not accentuated by action taken by other countries with a view to fix the rate of exchange between their coins and the gold standards of the West. It thus involved two things—first, the adoption of a uniform national currency, a step which it had already been promised should be taken in the new treaty with England; and, second, the establishment of a definite relationship between that currency and gold, but in such a manner as would not involve the general use of gold coins, which, indeed, are unsuited to the conditions existing in China.

CAN NEW COINAGE HAVE A FIXED GOLD VALUE?

In consequence of this request the United States Government appointed a commission of three experts to consult the financial authorities of the different countries of Europe and then to frame suggestions with a view to the establishment of a gold-standard currency in China. One of these experts was Mr. Jenks, who had already been deputed to visit India and the Dutch colonies in Asia, where a gold-standard currency had already been established, with a view to the introduction of a similar monetary system in the Philippines; and as he was proceeding to those islands again to superintend the carrying out of this policy he was deputed to proceed to China in order to submit to the Government of that country

such proposals as seemed best calculated to attain the object in view. The financial experts of Europe were unanimously of opinion that a national currency should be at once established in China, and that the coin used should, so soon as possible, be given a fixed gold value; but they differed as to the meaning of the words "so soon as possible."

Six out of the eight countries consulted, including the United States, Germany, Japan, and Mexico, considered that the two steps should be taken simultaneously and that the silver coin adopted by China should from the outset be given and be maintained at a fixed gold value. England and Russia, on the other hand, believed that China is too conservative to introduce a uniform currency and at the same time to take the steps necessary to maintain a fixed gold value for the coin adopted; they therefore considered it would be best to start with the introduction of a national silver currency, and then, later on, but so soon as possible, to give the silver coin adopted a fixed gold value. But the member of the original Commission who was deputed to continue the investigations in Asia and to submit proposals to the Chinese Government, Mr. Jenks, has been satisfied by his investigations into what has been done in India, and by his experience in assisting to introduce into the Philippines a silver currency on a gold basis, that it is possible even in China to take the two steps simultaneously, if China decided to do so—to from the outset fix a gold value to the silver coin adopted, and by this means to put a stop to the increasing fall in China of the gold value of silver. If such action be possible, there can be no question that from a financial point of view it would be to China's advantage to take it.

UNIT OF NEW COINAGE.

In introducing the new national silver coinage the first step for China to take is to decide upon the unit of the coinage, whether it shall be a dollar or a tael. It is suggested that a silver dollar is already a sufficiently large coin, and that a tael, no matter what denomination of tael might be selected, would be too heavy and cumbersome. Moreover, mints have been established in several of the provinces, and these have turned out dollars and fractions of dollars that, in the aggregate, amount to several tens of millions of dollars. To retain the dollar as the unit would have several distinct advantages. First, in so large a country as China it will be necessary to continue to employ several mints, and those already established can continue to be utilized for coinage purposes with only a slight modification of the device on the coin, and thus considerable expense, which would be entailed by the purchase of the heavier machinery required to mint a tael coin, will be avoided. Second, the people being already accustomed to the use of dollars, a large step has already been taken toward the establishment of a uniform currency. Third, if the value of the unit be fixed in cash, it is believed that the many kinds of taels used in different localities, not being coins but merely a weight of silver of varying fineness, would gradually disappear before the new coin.

If that coin were made a tael, money changers would unduly depreciate the value of the dollars already in use, to the serious loss of the people. If, on the other hand, the coin were made a dollar, those already issued should be accepted during a limited period by the

Government—and this should be published everywhere by proclamation—at a price somewhat above the market value, and thus holders of the old coin would suffer no loss; the latter being, of course, withdrawn from circulation and melted down. If, then, it be decided to adopt the dollar as the new unit, it is proposed that \$1 shall be equal to 1,000 cash; \$0.50 shall be equal to 500 cash; \$0.20 shall be equal to 200 cash; \$0.10 shall be equal to 100 cash; \$0.05 shall be equal to 50 cash; that the 10-cash piece now being coined be continued and bear the words now borne by those minted at Canton, namely: "One hundred equal one dollar," and that a new 1-cash coin be struck. Then 1 treasury tael might be held equal to 1,400 cash; 1 Haikwan tael might be held equal to 1,500 cash, and other taels might be converted into the new currency at corresponding rates.

This system, if adopted, would be a great boon to the people generally, merchants and agriculturists alike; because, as one of the principles of a national coinage is that the Government must always accept their own coins at the value it affixes to them, the people would always know exactly what silver coins or what copper coins they had to tender in payment of taxes due. There would no longer be any room for discussion as to how many cash represent a tael.

If China takes the second step and bases the new currency on a gold standard, it remains to decide how many grains of gold should represent a gold dollar—and that is a matter for experts. Supposing they decide that the silver dollar shall represent a gold value equivalent to 2 English shillings, then the Haikwan tael would represent 3 shillings.

IS CHINA IN FACT A SILVER-STANDARD COUNTRY?

But it may be asked, "If this proposal were adopted, would not China lose the commercial advantages she appears now to possess as a silver-standard country; and would not the effect of such action be, on the one hand, to cheapen the laying-down cost of foreign goods in China and so promote their consumption to the detriment of native manufacturers; and, on the other hand, by increasing the laying-down cost of native goods in foreign countries, to restrict the consumption abroad of such goods?" Before proceeding to consider what effect the adoption of a gold-standard currency by China is likely to exercise upon her foreign trade, it may be well to pause and examine whether China can with propriety be described as a silver-standard country. It is submitted that this is a misnomer. It is true that the Government statements of revenue are usually expressed in taels—that is, in silver—and in large commercial transactions the consideration for which the goods are passed is also expressed in taels. But as a matter of fact the vast majority of the population seldom see silver. In the interior the bulk of the revenue, especially the land tax and salt taxes, are collected in copper cash, and it is in copper cash that prices are expressed and purchases are made. The real standard of value in China is the coin known as cash; i. e., copper, and not silver. And this fact has a very important bearing upon the development of China's export trade.

As a rule one large mercantile transaction entered into by a Chinese merchant with a foreign merchant is the result of a number of minor transactions entered into by the former with cultivators or traders

in the interior. The tea which is sold as one crop to the foreign merchant has been collected from several gardens belonging to different owners, and the thousand piculs of hides sold to the foreign merchant represent many purchases from a large number of dealers. The Chinese middleman pays the cultivator or the dealer for his purchases in cash, and the important matter to both is not how many taels the former realizes from the transaction, but how many tiao, i. e., thousands of copper cash; because that is the factor which will determine how many cash he can afford to pay next season for his tea or hides. Now, during the last thirty years silver has depreciated, not only in terms of gold, but also in terms of copper cash. The number of the latter for which a tael or a dollar will exchange has been steadily falling. In 1874, 1 tael of Shanghai currency exchanged for 1,630 cash; to-day it exchanges for only 1,100. In the interior the depreciation of silver in terms of copper is even more marked, but to avoid exaggeration we will adopt Shanghai quotations. Then the Haikwan tael exchanged in 1892 for 1,560 cash, and in 1903 for 1,280 cash.

The value of the foreign export trade of China, which was 102,580,000 taels in 1892, rose to 214,350,000 taels in 1903. Expressed in copper cash, it rose from 160,890,000 tiao to 274,360,000 tiao. In other words, while the increase in value, if expressed in silver, amounted to 108 per cent, it amounted to only 70 per cent when expressed in copper; and as the depreciation of silver in terms of copper began some years later, so now it is proceeding more rapidly than that in terms of gold, having during the last two years shown a percentage of decline more than twice as large as that shown by the latter. How much further it is likely to proceed can not be definitely stated, but the depreciation of silver in terms of copper which has already taken place and the rate at which it is still progressing show that it would be unwise to attach any great importance to the idea that China is a silver-standard country or to gauge the profit she derives from her foreign export trade by the increase of its value in terms of silver.

It is necessary to bear this point in mind while we proceed to consider whether the adoption of a gold standard would adversely affect China's foreign trade.

WOULD GIVING NEW COINS A FIXED GOLD VALUE ADVERSELY AFFECT CHINA'S FOREIGN TRADE?

First, as regards imports of foreign goods into China. A table has been compiled (Appendix No. 1) showing the net value, both in silver and in gold, of the imports received annually from abroad during the last thirteen years, 1891-1903, and the average gold value of the Haikwan tael in each of those years.

Examination of this table shows:

1. That the silver value of this trade has steadily increased year by year—with the exception of the year 1900—and has risen from 134 million taels in 1891 to 326,740,000 taels in 1903, or slightly over 140 per cent.

2. That the gold value of the Haikwan tael, though there have been ups and downs in the course of the thirteen years, shows at first

a rapid and then a fairly steady decline, the value having been 4s. 11d. in 1891, and only 2s. 7¾d. in 1903, a fall of 46½ per cent.

3. That, as a consequence of this fall in the gold value of the tael, the gold value of this trade has increased from £32,930,000 to only £39,630,000, or 20 per cent; and

4. That it is not exchange that determines what quantity of foreign goods China will purchase. In other words, the table shows that China does not take a larger quantity of foreign goods when exchange rises and a smaller quantity when exchange falls. Thus it will be seen that she took goods of practically the same gold value in the years 1891 (£32,930,000) and 1900 (£32,760,000), though exchange was 4s. 11d. in the former and only 3s. 1¼d. in the latter year. So, too, she took goods of practically the same gold value in the years 1899 (£39,880,000) and 1903 (£39,630,000), though exchange was 3s. 0⅛d. in the former and only 2s. 7¾d. in the later year, and in 1902, when exchange touched its lowest point and averaged for the year only 2s. 7½d., she took foreign goods representing a gold value of £41,000,000—the highest value in the thirteen years—or nearly 25 per cent more in gold than she took in 1891 (£32,930,000), when exchange was at its highest point during the thirteen years—4s. 11d.

This seems to show conclusively that there is no reason to apprehend that an increased consumption of foreign goods to the detriment of native manufactures will result from giving to the new currency a fixed gold value. The figures in Addendum No. 1 would seem to suggest that China has a certain sum, averaging roughly £33,000,000 per annum—though where exactly she derives that sum we are unable to state—for investment in foreign goods, and that she so invests it year after year without regard to the rate of exchange ruling. If that be so, the Chinese people will still continue to expend about the same amount in gold annually, but they will receive a larger quantity of yarn, kerosene, and sugar, the articles which show the largest increases during the period in question, or of rice in periods of famine—an advantage, not a loss, to the country.

Next, as regards native exports to foreign countries. Addendum No. 2 shows the value, both in silver and in gold, of the native goods exported abroad annually during the last thirteen years, 1891–1903, and the average gold value of the Haikwan tael in each of those years. Examination of this table discloses practically the same results as does examination of Addendum No. 1. It shows—

1. That while the silver value of the trade has been subject to many fluctuations, it has increased from 100,950,000 taels in 1891, to 214,350,000 taels in 1903, or over 114 per cent.

2. That the gold value has only increased 14 per cent, from £24,-820,000 to £28,280,000.

3. That it is not exchange that determines what amount in gold foreign countries invest in Chinese produce, for the gold value of exports abroad was practically on a level in the years 1891, 1897, and 1900—£24,820,000, £24,350,000, and £24,680,000, respectively—though the rates of exchange in those years were 4s. 11d.., 2s. 11¾d., and 3s. 1¼d., respectively, the average value for the entire period being £24,510,000.

It is, however, a generally accepted axiom that it is wise policy to promote the cheapening of the laying-down cost in foreign countries

of native products, because the cheaper they can be placed on the market the more effectively can they compete with similar products from other countries.

Hence all nations do their utmost to develop the means of internal transport, few levy export duties, and some even go so far as to encourage export by means of bounties. From this point of view the proposal to establish the new currency in China upon a gold basis would at first sight appear to be an economical mistake, because if silver continues to fall the effect of the proposal to establish the dollar on a parity of 2 shillings would be to raise the laying-down cost in foreign countries of Chinese products somewhat above what that cost would be but for the adoption of this proposal. And it was for this very reason that when the government of India initiated the policy of placing the currency of that country on a gold basis that policy was strenuously opposed by some of the greatest financial authorities in England, who prophesied that it would ruin the export trade of the country and bring distress to its people. The course of trade subsequent to the date at which this legislation took effect would, however, appear to show that the apprehensions of these distinguished critics were ill-founded, and that instead of falling off the export trade of British India has been marked by healthy expansion.

The Indian government took the first step toward placing its currency on a gold basis (at the rate of 15 rupees = £1) in 1893 by closing the mints to the free coinage of silver. It was not, however, till 1896 that the effect of this measure began to make itself felt, and in the following year the parity of exchange aimed at had been practically attained. In Addendum No. 3 are given statistics of the foreign trade of India from the year 1888–89 to the year 1902–3. From them it will be seen that while the average annual value of the export trade of India during the five years prior to 1896–97 (when the rupee passed at its market value) was 1,079 millions of rupees, the average annual value of that trade during the five years following 1897–98 (the period of gold standard) has amounted to 1,189 millions of rupees.

The effect of the adoption of a gold standard in Japan has been precisely the same. Japan adopted a gold standard in 1897, and the average annual value of the export trade during the six years prior to that year amounted to 105 millions of yen, while the average annual value during the six years following 1897 amounted to no less than 231 millions of yen (vide Addendum No. 4).

IF IT DOES NOT, HOW RECONCILE THIS FACT WITH THEORY THAT IT IS WISE POLICY TO REDUCE PRICE OF SHIPMENT OF NATIVE PRODUCTS?

The question naturally arises: "Seeing that the effect of placing a silver currency on a gold basis is, in a falling silver market, to give the silver coin a value higher than that of the metal it contains, and consequently to raise the price abroad of the product of the country concerned, how is it possible to reconcile expansion of the export trade following on the adoption of a gold standard currency with the theory that it is economically advantageous to cheapen the laying-down cost of a country's exports?"

The explanation appears to be that though a silver currency has the advantage of enabling exports to be laid down in gold-standard countries at a lower cost when silver is falling in price than similar products from gold-standard countries can be laid down at, that advantage is, as a fact, far more than counterbalanced by the instability which is incidental to a silver currency. The sudden and violent fluctuations of value which have characterized the silver market during recent years have tended to convert legitimate trade into little else than a gamble. The most careful calculations of a merchant are upset without warning by a cause over which he has no control; and the prudent man, rather than run the risk of a disastrous loss, deems it wiser to sit still and wait until the causes which are so violently disturbing the silver market have passed, with the result that the development of trade is seriously retarded or brought entirely to a standstill.

If he does continue his business, then he must raise the price asked for foreign imports and lower the price to be given for native exports in order to cover the risk of a fall in exchange, and in consequence trade must be restricted. Take, for instance, the present year. The value of the Haikwan tael was 3s. ¾d. in February and 2s. 7¾d. in April. Suppose a merchant invested £10,000 in tea costing 15 taels per picul[a] in February. His £10,000 would realize 65,850 taels, which would purchase 4,390 piculs of tea. Before this tea can reach Europe Merchant B, taking advantage in the fall in exchange, also invests £10,000 in April in similar tea. His £10,000 realizes 75,590 taels, with which he purchases 5,039 piculs. The latter purchase having been telegraphed to Europe, the price of this tea will at once fall there and Merchant A will not be able to dispose of his tea except at a serious loss. Again, in February, exchange then ruling at 3s. ¾d., a foreign merchant calculates that he can sell gray shirtings on the Shanghai market with a small profit, at 3 taels per piece, and he enters into a contract to deliver 21,950 pieces at that price. He delivers the goods in April and receives his 65,850 taels. This sum represented £10,000 at the time he made the contract, but when paid to him it will only realize £8,711, so that instead of the profit he had calculated upon he has to face a loss of £1,289, or close on 13 per cent.

The serious character of the impediments placed in the way of legitimate trade by the constant fluctuations in exchange which occur is exemplified by the following statement of the value of the Haikwan tael, month by month, from January, 1903, to April, 1904:

1903.	s.	d.		s.	d.
January	2	5	October	2	10¼
February	2	4½	November	2	8¾
March	2	4½	December	2	8
April	2	6½			
May	2	8	1904.		
June	2	7	January	2	11½
July	2	8½	February	3	¾
August	2	10½	March	2	8¾
September	2	11	April	2	7¾

ADVANTAGES TO COUNTRY OF GIVING FIXED GOLD VALUE TO COINS.

The only means of avoiding these fluctuations is by establishing the new currency on a gold basis. Until that is done the new coins, just as ingots of silver have done in the past, will pass at the market value

[a] Picul=133⅓ pounds.

of the metal they contain and therefore will rise and fall in response to the manipulations of the silver market by speculators. That, but for these fluctuations, trade would during recent years have shown a much larger expansion than it has done, there can be no question. By the establishment of the new currency on a gold basis the cause of these can be removed and stability of exchange will be assured. Such a change should in any case result in a large development of trade; but should it be effected simultaneously with the opening up of the country by the railroads now under construction and to be undertaken in the near future, that development can scarcely fail to be enormous because new markets will be assured to native produce which previously could not be moved at all or only at the cost of heavy transport charges. The proposal would therefore, it appears, be beneficial, not injurious to trade.

It remains to consider in what manner the adoption of a gold basis for the new currency would affect China's obligations to foreign governments and to foreign bondholders. If the dollar be, as has been suggested, fixed at 2 shillings (or thereabouts) then the value of the Haikwan tael would be 3 shillings (or thereabouts), the value at which it was taken by the foreign powers in the protocol of September 7, 1901. Now, the foreign powers maintain that the indemnities imposed by that document are payable in gold; China, that the debt is a silver debt; and though the discussion has now continued for more than two years each side adheres to its own interpretation of the agreement. If the gold value of the Haikwan tael were fixed at 3 shillings, all cause for future discussion would cease; but if, as seems possible, experts consider it advisable to fix the gold value of the dollar at slightly above that of the Japanese yen—say, at 2s. 1d.—then it would be to China's interest to accept the interpretation placed by foreign powers on the protocol and to pay in gold; for though the difference on a single tael is trifling, when that difference is multiplied by millions the aggregate is a very large sum. As regards the foreign indebtedness incurred by China prior to 1901, the case, however, is different. That indebtedness is a gold indebtedness and interest on the loans raised has to be paid, and the principal of them has to be repaid, in gold. When those loans were raised the Haikwan tael exchanged for about 3s., or 36d.; in 1902 it exchanged at one time for less than 30d.

Then, the fluctuations in exchange rendering it dangerous to import silver, the stock fell until it was unequal to the current demands of business, and in consequence the price rose. Latterly again the outbreak of war between Russia and Japan, coupled with the approach of the tea and silk seasons, has caused a further considerable rise, and the gold value of the Haikwan tael now stands at about 33½ pence. But once these temporary causes have ceased to work it is possible that the gold value of silver in China may again fall to the former level. Now, the sum which China has to pay during the current year for the service of her foreign loans contracted prior to 1901 amounts to £3,196,389 in gold and 763,000 taels in silver; and the average sum due for the next ten years is practically the same. If the gold value of the Haikwan tael be fixed, as suggested, at 3 shillings, China would have to pay 22,072,000-odd taels, but should no gold value be fixed and it fell to its former level of 30 pence, China would need,

in order to meet her obligations, no less a sum than 26,334,000 taels. In other words, by adopting the rate proposed, China would during ten years effect an annual saving 4¼ millions of taels on her loan obligations alone. But this is not the only saving she would effect. For every £10,000 she has to pay on account of railway loans, and for every £10,000 she spends in the purchase of railroad material and rolling stock, or of men of war and arms, she would require 67,000 taels only instead of 80,000 taels—i. e., she would effect a saving of 13,000 taels, in the aggregate a very large sum. To the Government, therefore, the adoption of the proposal would be most advantageous.

The considerations set forth above show clearly, it is believed, that if it be possible, when introducing the new currency, to base it on a gold standard, such action would be to the benefit of the Government and people alike. It may be well, in order to avoid misapprehension, to again state that the introduction of a gold-standard currency does not mean the introduction of gold coins; it means that silver and copper coins will continue as heretofore to be employed in China, but that a gold value will be fixed for these coins, and that steps will be taken to insure that the gold value is maintained.

If the new currency can be established on a gold basis, there can be no question but that the work should be entered upon now. The gold value of silver in China is now comparatively high; later it may fall, and China may have to content herself with a lower gold value for her unit of currency than she could now secure with comparative ease. China should reflect on Japan's experience. In 1871 the latter country established a gold-standard currency, the value of the yen being fixed at a little over 4s. The steps she took to maintain the value of the yen at that level were inadequate and the country was drained of gold, with the result that the silver yen became the unit of currency, and so remained down to 1897, when Japan, having adopted better-advised measures, succeeded in establishing her currency on a gold basis; but owing to the decline which had meanwhile taken place in the value of silver, Japan had to content herself with fixing the value of the yen at exactly half the value at which it had been fixed in 1871.

It is true that India when placing her silver currency on a gold basis fixed the legal value of the rupee at more than 20 per cent above the market value of the metal contained in that coin; and it may be said that what India did China can do. The only means of enhancing the gold value of a silver currency is, however, by restricting the amount of that currency. In India it was five years before this artificial restriction of the currency produced the desired effect, and during that period it caused very serious interference with trade. Were the currency in China to be thus artificially restricted during a series of years such serious discontent would result that it would probably be necessary to abandon such a policy before it became effective, in order to avoid internal trouble. Whether or no China can, when introducing her new currency, establish it on a gold basis experts alone can decide, and the writer, not having expert knowledge, can not say. But Mr. Jenks, who is an expert and as such has been selected by the United States Government for this special work, expresses a confident opinion that if China really desires to do it she can do it; and in his memorandum on "A New Monetary System for China" he has

stated in a general way the action which it will be necessary for China to take in order to bring this undertaking to a successful issue. Of these, two are the most important, and it is precisely these two which are likely to receive the most adverse criticism from the high officers of the Empire—one, the appointment of a foreign comptroller of the currency; the other, the employment of the seigniorage profit from coinage as one of the steps to form a special gold fund in order to maintain the gold value of the currency. Hitherto the mints established in the various provinces have been under the management of the provincial officials; some have reported to the throne the number of coins minted annually and the seigniorage profits derived therefrom; but, judging from the pages of the Peking Gazette, the majority have not submitted such reports. The seigniorage profits seem to have been almost always retained to meet provincial needs. The extent of China is so vast that to employ a single mint, even if it were large enough to meet the currency needs of the Empire, would be wasteful policy, because of the expense of transporting bullion to the mint for coinage and then transporting the minted coins to the several parts of the Empire. The bulk of the mints already established will, therefore, be retained, but it will be necessary that the control of them be surrendered by the various provincial authorities and be vested in one bureau or officer at the capital, on whom will rest the responsibility of insuring that all coins of the same denomination, no matter where minted, are of uniform weight and fineness. The transfer of the control of the mints from the provincial authorities would necessarily entail the transfer from them of the control of the seigniorage profits derived from coinage. All that is proposed, therefore, is that these profits derived from coinage shall be set aside to assist a fund specially raised in maintaining the coinage at its par value.

As regards the comptroller of the currency, it has to be remembered that his duties will be of a very complicated nature, and of a kind that hitherto Chinese have had no experience of. He will have to watch the movements of the precious metals all over the world, to note the tendencies of exchange, and to take measures of precaution accordingly by buying gold if a demand for silver drives the price of that metal up or by selling gold if the price of silver falls. It will be his duty also, after careful examination of local conditions, to determine whether or no to suspend the issue of coins of a certain denomination in a given province; and should a 10-cent piece, say, fall below its par value, so that one dollar exchanges for more than ten of them, he will have to issue immediate orders to insure that steps are taken to redeem them at their face value and so reestablish the parity of the coin. On him, too, will rest the responsibility of determining the amount of bank notes to be issued in any one province, and the reserve in coin to be maintained in order that they may be redeemed at any time on demand. No one but an expert with special training would possess the knowledge requisite for the performance of these duties, and it is only a foreigner who, at the outset, would have this knowledge. The office would be one of such great responsibility that it could not be entrusted to any but a thoroughly competent person without grave danger to the State; but were England, who has just reorganized the financial administration of Siam with signal success, or were the United States, who has so readily and so disin-

terestedly responded to China's appeal for assistance in this matter, requested to recommend a suitable person for the position, I see no reason to think that China would have ground to apprehend any evil consequences, political or other, from giving him the appointment; while the introduction of the monetary system, which it then would be possible to establish, would, in a few years, it is anticipated, result in an expansion of trade and render possible a reduction of taxation that would be of the greatest benefit to the Empire.

ALFRED E. HIPPISLEY.

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ADDENDUM No. 1.

Foreign trade of China—Imports (net).

Year.	Silver value.	Gold value.	Gold value of haikwan tael.		
	Haikwan taels.		*s.*	*d.*	*Pence.*
1891	134,003,863	£32,932,617	4	11	59.0
1892	135,101,198	29,412,657	4	4¼	52.25
1893	151,362,819	29,799,566	3	11¼	47.25
1894	162,102,911	25,919,580	3	2⅞	38.875
1895	171,696,715	28,079,567	3	3¼	39.25
1896	202,589,994	33,764,999	3	4	40.0
1897	202,828,625	30,213,014	2	11¾	35.75
1898	209,579,334	30,231,185	2	10⅝	34.625
1899	264,748,456	39,850,158	3	0⅛	36.125
1900	211,070,422	32,759,888	3	1¼	37.25
1901	268,302,918	39,756,342	2	11 9/16	35.5625
1902	315,363,905	40,997,958	2	7⅕	31.20
1903	326,739,133	39,632,245	2	7⅔	31.667
Total	2,755,490,293	433,349,776			

Annual average, 211,960,792 Haikwan taels = £33,334,598.

These figures show that while the silver value of foreign imports has increased a little over 140 per cent in the thirteen years, the gold value of them has increased only 20 per cent; and that whatever the denominating factor which determines the amount of foreign goods to be purchased, that factor is not exchange, the gold value of such purchases having been practically the same in the years 1891 and 1900, though the gold value of the Haikwan tael was 4s. 11d. in the former year and only 3s. 1¼d. in the latter year. Similarly the gold value of such purchases was practically the same in the years 1899 and 1903, though the gold value of the Haikwan tael was 3s. 0⅛d. in the former and only 2s. 7⅔d. in the latter year; while the gold value of the trade in 1902, the year in which exchange was at its lowest point, was 25 per cent higher than that of 1891, when exchange was at its highest level.

ADDENDUM NO. 2.

Foreign trade of China.—Exports.

	Silver value.	Gold value.	Gold value of 1 haikwan tael.	
	Haikwan taels.		*s. d.*	*Pence.*
1891	100,947,849	£24,816,346	4 11	59
1892	102,583,525	22,332,288	4 4¼	52.25
1893	116,632,311	22,961,986	3 11¼	47.25
1894	128,104,522	20,483,379	3 2⅜	38.375
1895	143,293,211	23,434,411	3 3¼	39.25
1896	131,081,421	21,846,903	3 4	40
1897	163,501,358	24,354,889	2 11¾	35.75
1898	159,037,149	22,944,422	2 10⅝	34.625
1899	195,784,832	29,469,696	3 ⅛	36.125
1900	158,996,752	24,677,621	3 1¼	37.25
1901	169,656,757	25,139,243	2 11 9/16	35.5635
1902	214,181,584	27,843,606	2 7⅕	31.20
1903	214,352,467	28,283,117	2 7⅔	31.667
	1,998,153,738	318,587,907		

Annual average, 153,704,134 Haikwan taels=£24,506,685.

These figures show that while the silver value of exports abroad has increased over 112 per cent the gold value of them has increased less than 14 per cent, and that the gold value remains practically unaffected by exchange, the gold value of exports abroad having been to all intents and purposes on a level in the years 1891, 1897, and 1900, though the rates of exchange in those years were 4s. 11d., 2s. 11¾d., and 3s. 1¼d., respectively.

ADDENDUM NO. 3.

Foreign trade of India.

[In thousands of rupees.][a]

Year ending March 31—	Net foreign imports, i. e., imports less reexports.			Native exports.		
	By sea.	By land.	Total.	By sea.	By land.	Total.
1889	654,405	37,154	691,559	930,495	44,801	975,296
1890	649,027	35,053	684,080	991,645	49,305	1,040,950
1891	677,419	35,152	712,571	959,938	30,297	990,235
1892	649,473	39,797	689,270	1,036,884	39,322	1,076,206
1893	616,750	36,909	653,659	1,020,052	33,800	1,053,852
1894	725,894	40,374	766,268	1,020,714	34,317	1,055,031
1895	684,714	43,595	728,309	1,038,562	37,595	1,076,157
1896	682,188	45,773	727,981	1,096,167	37,691	1,133,858
1897	720,703	47,941	768,644	999,504	43,028	1,042,532
1898	699,093	50,227	749,320	938,816	40,836	979,652
1899	687,303	55,026	722,329	1,094,285	46,379	1,140,664
1900	720,120	61,631	781,751	1,057,908	51,068	1,108,976
1901	776,861	64,149	841,010	1,045,546	54,262	1,099,808
1902	852,726	69,004	921,730	1,216,449	60,282	1,276,731
1903	826,180	68,700	894,880	1,258,800	59,900	1,318,700

[a] Rupee = about 32¼ cents.

The mints were closed to the free coinage of silver in 1893, but the effect of this measure only began to make itself felt in the year 1896–97, by which time the average rate per rupee, at which telegraphic transfers and council bills were sold in London, had risen to 14.491d. from 13.101d. in 1894–95. In 1897–98 it had risen to 15.354d., and from that time forward the gold value of the rupee has been maintained at 16d., the level aimed at by the legislation of 1893.

The average value of the import and of the export trades during the five years before 1896–97 and after 1897–98 is a matter of some interest. The figures are: Five years prior to 1896–97, average annual value of imports, 713,000,000; exports, 1,079,000,000. Five years following 1897–98, average annual value of imports, 836,000,000; exports, 1,189,000,000.

Addendum No. 4.

Foreign trade of Japan.

Year.	Exports.		Imports.		Gold value of one yen.
	Yen.	Pounds sterling.	Yen.	Pounds sterling.	*Pence.*
1891	79,527,272	12,790,636	62,927,268	10,120,802	38.6
1892	91,102,754	13,096,021	71,326,080	10,253,124	34.5
1893	89,712,865	11,475,270	88,257,172	11,289,562	30.7
1894	113,246,086	11,890,839	117,481,955	12,335,606	25.2
1895	136,112,178	14,348,909	129,260,578	13,626,220	25.3
1896	117,842,761	12,766,303	171,674,474	18,598,068	26.0
1897	163,135,077	16,585,400	219,300,772	22,295,579	24.4
1898	165,753,753	16,787,526	277,502,157	28,097,003	24.3
1899	214,929,894	22,030,314	220,401,926	22,591,200	24.6
1900	204,429,994	20,698,537	287,261,846	29,085,262	24.3
1901	252,349,543	25,550,391	255,816,645	25,901,435	24.3
1902	258,303,065	26,476,065	271,731,259	27,852,462	24.6
1903	289,502,443	29,674,000	317,135,517	32,506,390	24.6

Japan adopted gold monometallism in 1871, but the measures taken were inadequate to prevent a drain of gold abroad. In 1897 she reverted to monometallism and took measures which have proved effective in retaining the gold amassed in the country. The average annual values of the foreign trade of Japan during the six years prior to and following on the year in which the gold standard was established compare thus: Six years prior to 1897—Average annual value of imports, 106,821,254 yen; exports, 104,590,652 yen. Six years following 1897—Average annual value of imports, 271,641,560 yen; exports, 231,044,782 yen.

Value in copper cash of 1 tael, Shanghai currency.

	Cash.		Cash.
January, 1871	1,560	January, 1888	1,420
July, 1871	1,600	July, 1888	1,420
January, 1872	1,640	January, 1889	1,400
July, 1872	1,560	July, 1889	1,410
January, 1873	1,610	January, 1890	1,350
July, 1873	1,620	July, 1890	1,330
January, 1874	1,630	January, 1891	1,330
July, 1874	1,615	July, 1891	1,370
January, 1875	1,595	January, 1892	1,380
July, 1875	1,600	July, 1892	1,410
January, 1876	1,560	January, 1893	1,410
July, 1876	1,530	July, 1893	1,380
January, 1877	1,500	January, 1894	1,380
July, 1877	1,470	July, 1894	1,330
January, 1878	1,446	January, 1895	1,320
July, 1878	1,435	July, 1895	1,320
January, 1879	1,460	January, 1896	1,230
July, 1879	1,450	July, 1896	1,240
January, 1880	1,490	January, 1897	1,220
July, 1880	1,490	July, 1897	1,250
January, 1881	1,520	January, 1898	1,150
July, 1881	1,520	July, 1898	1,190
January, 1882	1,500	January, 1899	1,190
July, 1882	1,520	July, 1899	1,180
January, 1883	1,520	January, 1900	1,190
July, 1883	1,500	July, 1900	1,200
January, 1884	1,490	January, 1901	1,210
July, 1884	1,480	July, 1901	1,210
January, 1885	1,480	January, 1902	1,210
July, 1885	1,490	July, 1902	1,200
January, 1886	1,480	January, 1903	1,150
July, 1886	1,480	July, 1903	1,140
January, 1887	1,390	January, 1904	1,110
July, 1887	1,390	May, 1904	1,320

Value in copper cash of 1 Haikwan tael currency (Tientsin).

	Cash.		Cash.
1883	3,286	1893	3,155
1884	3,286	1894	3,157
1885	3,286	1895	2,918
1889	3,074	1896	2,730
1890	3,074	1897	2,625
1891	3,286	1898	2,512
1892	3,263		

2. MEMORIALS TO THE CHINESE IMPERIAL GOVERNMENT.

(a) Memorial Recommending the Adoption by China of a Gold-Standard Monetary System.

Presented by the Chinese minister to Russia.

Owing to the fact that the United States and Mexican monetary commissions have been to Russia and completed their work and that the American commissioner is now going to China to confer upon the coinage question, this memorial has been prepared and is respectfully presented, and we humbly beg the favor of the imperial glance.

We beg to state that the United States and Mexico have appointed a special commission of experts to invite the respective Governments of Great Britain, France, Germany, and Russia to confer upon the

subject of the relative value of silver and gold and to consider a monetary system for the Chinese Government. Your humble servant received a telegram from the board of revenue saying that he should, upon the arrival of the said commissions, appoint an official to listen to their plans and report upon the matter to the board. I am now in receipt of a letter from the American commissioner, Mr. Jenks, saying that he has received instructions from the President to proceed to China and make a thorough investigation of the matter.

The United States is well known for its successful handling of financial questions and at the same time has always showed great friendship for China, so that we should certainly accept without delay this energy of hers in our behalf, whereby she wishes to develop a system for us. I read with due reverence the Imperial edict published in the third moon of the present year, by which Prince Ch'ing and Chü Hung-chi were appointed to consider and deal with the whole question of the monetary administration. I am pleased to see that the monetary question is considered by the throne to be one of great importance and requiring lengthy consideration.

In the matter of a monetary system the coinage is the first thing to be considered. Your servant begs to relate in detail to the Empress Dowager and the Emperor the exact state of affairs both foreign and domestic. The question of coinage is in itself a nation's own affair; but nowadays there is not anything in business, commerce, or government that does not mutually involve the people of different nations, which does not involve foreign exchange. If the monetary systems of the countries do not agree, it is impossible to prevent loss. To have a good monetary system a country must have a definitely fixed coinage, using gold, silver, and copper at a definite fixed ratio. The coins must be of the same pattern, value, and fineness throughout the country, if the best interest of the people is to be considered and it is desired to secure the faith of foreign nations. Those who have a gold standard do not, for that reason, suffer any loss in exchange, and international intercourse is easily arranged.

Financial experts have estimated the year's yearly output of gold, and there is no cause for concern lest it be not enough for the supply of the people of every country. As to the output of silver, there is no end to it. The greater the supply of silver the cheaper it gets, so that the present high price of gold is not in reality that gold is dear, but rather that silver is cheap. China has made a practice of using silver, and consequently, using this as a standard, the Chinese consider that gold has daily gotten dearer. Other countries have made a practice of using gold, on the other hand, and hence, using this as a standard, they consider that silver has daily gotten cheaper. A gold-standard country is like a man who has accumulated riches to buy grain—if the grain is cheap, he reaps the benefit. A silver-standard country is like a farmer who has accumulated his grain and holds it for a rise in price—if the price goes down, he suffers. So silver-using countries and gold-using countries are in the same case as two people making a barter, in which one man's daily increase of loss (on account of his waiting each day for a higher price) is only the other man's daily increase of gain. Therefore, if we use uncoined silver for money we are in just such a case, of barterers with those countries which have a gold coinage, and it is needless to say which country is the loser. To use uncoined silver for money is like using uncooked rice for food or

uncut cloth for clothing, for uncoined silver is nothing more than a product of the earth. Other nations consider silver merely as a commodity and not as money.

It is already hard to meet our demands, and hereafter it will be all the harder to put the country on a firm footing. At the present time gold is used in all nations throughout the world. Even among their dependent countries there is not one which does not use gold. Russia in Bokhara uses gold. England in India uses gold. The United States in the Philippines uses gold. England is now planning to use gold in Hongkong, and Russia has already begun to introduce roubles into Manchuria—just as if Manchuria were one of her own dependencies, as in the other cases mentioned. Why do they hasten so? Because when a country plans and marks out a frontier she must reckon upon its expenses—for is not the profit of her dependency the nation's own profit as well? It is equally evident that as the power of gold increases the power of silver decreases, consequently a country will spare no efforts or endeavors to regulate the expenditures so that her dependency will not be a burden to her. Where is there another nation as rich as China in land and subjects which would not speedily change her policy?

It is very evident, then, that nations which have not a gold standard, but keep on with silver at a debased value, will suffer. The system of coinage as adopted by the other nations has a fixed value in relation to each other, and although there are exchange charges, the market value is approximately the same, so that banks have no change to impose upon the people, nor have foreign merchants any opportunity for swindling. If China has a uniform national coinage, then she will be on the same footing with other nations, and there will be no cause for anxiety in the matter of exchange. The three metals, gold, silver, and copper, will have a fixed relative value; one silver piece being worth so many copper ones, and one gold piece being worth so many silver ones. Once fix the relative value, and it must follow that all financial affairs, large and small, will have some definiteness. Coins can then be used everywhere, far and near, at the same value. Officials and people can then use them without having them discounted for short weight. With everything uniform, business affairs will be easily managed. Rapacious underlings and dishonest traders will have no opportunity to squeeze.

It will be to the great internal advantage of the country, both business-wise and politically. Then there will be some confidence both among Chinese and foreigners, and in foreign intercourse it will only be necessary to consider the ordinary price of the article, whether it is high or low, and it will not be necessary to figure on the danger of a rise or fall in the price of silver. It being easy, therefore, to determine loss or gain, business will flourish, capital will accumulate, and it will be beneficial in every way. England's commercial supremacy, America's sudden advance, and Japan's rapid progress are all due to this one fundamental reason, and the benefits they derive are innumerable.

Nevertheless, this is a large undertaking and is hard to bring about; and those who object have some reason on their side. But your servant begs to state that there is absolutely nothing to be feared in spite of what the opposition may say against the plan and he will

proceed to explain in detail. The opposition bring up eight counts against the plan, which will be taken up one by one.

First, they say that Chinese commodities are all cheap, and that the people are economical; that copper is the ordinary means of exchange, silver being used but little, and, needless to say, gold not at all.

As to this argument, they do not understand that the idea is to use gold in order that foreign nations will have faith in China, and it is not desired that the masses will suddenly begin using gold as a medium of exchange. They may use copper or silver just as they please. At present sycee silver is used in Peking, though the common people seldom see it and in the commercial ports the foreign dollar is used, though the dollar is seldom seen in the country districts. That is just the way it will be with gold; it will begin to be used at the ports and its use will gradually work inward, and from the large centers it will spread to the frontiers. Every place will change from copper to silver and from silver to gold, gradually. There will be no sudden jump from copper over to gold. From the time when bartering was done with furs, hides, rice, and cloth up to the present day people have used as a medium of exchange, first iron, then copper, then silver, and then gold, going gradually from one to another. The change could neither have been checked nor could it have been forced. There is, then, nothing to be concerned about in the first count.

The opposition hold, secondly, that China is a large country with very many people, and that there is not enough gold obtainable to change in a day to a gold standard. They do not understand that in inauguarating this system the desire is to let the other nations know that we really have a gold reserve with which to guarantee the settled ratio between gold and silver and to prevent fluctuations. Moreover this will prevent the losses sustained in trade by the sudden appreciation in value of the imports as against the depreciation of the exports. It will not be necessary to coin much gold for use in trade, as it is not expected that gold alone will be used for this purpose. The gold reserve of India is not 10 per cent of the amount of other money in regular circulation. If gold and silver are both used to meet the demands of trade, a gold coinage to the amount of 15 per cent of the silver coinage would be sufficient. China's silver coinage is practically all in the hands of the people, and if it were all gathered together, and its value estimated in gold, there would not be 10 per cent of that amount in the Empire. But if the amount of silver is too great the Government can issue gold and buy silver which they can store away, thus reducing at once the amount of silver on the market. This will cause the banks also to let out their gold in order to obtain silver for commercial use. Then the Government can buy up gold and issue silver to relieve the banks. Thus there need be no apprehension about regulating the supply and demand—the second count of the opposition.

The third count is that the Chinese banks make their livelihood out of exchange, discounts, false cash, etc., and they consider weight, fineness, short count, and small cash as a source of profit. If the country's coinage be settled and uniform this source of supply will be reduced to a minimum, hence the change does not appeal to them.

As to this, they do not understand that the things they do are a

menace to trade and should be prohibited by law, just as weights and measures are established by the Government. Once establish a national coinage and this practice, though not forbidden, will stop. Trade, moreover, will prosper and all business interests flourish. There will be more need of large banks and the small banks need have no fear lest they will have no means of making money. These small gains will be forbidden merely that they may begin making large gains. So much for their third contention.

Now for the fourth count. Prominent official men of certain countries ridicule Chinese officials because in the collection of taxes and duties they use silver and copper of various different kinds, and they manipulate the discount and exchange so as to appropriate money to themselves. They say that the salaries of these officials are so small that they depend upon this to make up the difference, and as the establishment of a national currency would take away their livelihood they invariably set up a howl of opposition to it. In this the prominent foreign officials do not take into consideration the fact that reforms are made for the benefit of the people and not for the benefit of these mercenary officials. It s merely the fact that the currency is unstable that has brought about this wretched state of affairs. If the coinage were uniform this practice of appropriation of funds would be stopped. This answers the fourth objection.

The fifth objection is that the mints in the various provinces now reckon upon a surplus to make up deficiencies in the provincial expenses. If, in the new monetary system this all had to be accounted for, they would suddenly be deprived of these funds, and hence they do not want any change. They do not understand that a national currency does not necessarily mean that there shall be only one mint and that there can be no branch mints.

The very fact that we have had no uniform coinage system and there are no coins everywhere current, caused the provinces heretofore to coin silver dollars for the convenience of the people. It was not originally intended that the surplus of the mints should go to enrich the various provinces. It all belongs to the nation, and why distinguish between this place and that?

Thus disposing of the fifth count, let us proceed to the sixth, which is this: China's foreign indemnity of several millions is reckoned in silver. If we suddenly adopt a coinage of gold and silver in reckoning the amounts due in the moneys of these various countries it will be difficult to guarantee that we will not involve ourselves in trouble. They do not understand that all nations have recently adopted the gold standard, and that the United States, England, Germany, and France, therefore, especially desire that we also should use gold for the sake of convenience in commerce. For that reason England, in her commercial treaty, inserted a clause providing for the adoption of a definite monetary system for China. The United States has been even more solicitous, using every effort in our behalf. If even these other countries take this stand, we ought to be the more anxious to embrace the opportunity to adopt a firm policy; then if there are one or two nations who do not wish China to become a rich and powerful nation, they can not well come out publicly and try to prevent it.

This answers their sixth objection, and it is claimed, seventhly, that if we have a gold standard to obtain the confidence of foreign nations,

the balance of trade being constantly against us, foreign merchants will be sending all our money home, and our "gold coinage" will flow outward as fast as we can coin it. They do not understand that when imports are great and exports small, money gets into the hands of foreigners and the amount of money on the market is small. If the amount of money on the market is small its value is high, and with the money dear prices must go down. The foreign merchants will compete against each other in buying, so our exports will increase and our money return to us. Again, if money is scarce then the price of foreign commodities will rise and their sale will diminish. If the sale of foreign goods diminishes, they will bring over less and money will return into circulation. Moreover, if money is scarce the rate of interest will go up.

If the rate of interest goes up, then foreigners who had counted on sending their money home will leave it here for the sake of the high interest. France at the present time has 15,000 wan (wan=10,000 ∴ 150,000,000) francs deposited in New York at interest, which she does not take back to Europe. China's imports exceed her exports from 10 to 15 million taels a year, but the actual silver, instead of being exported, is invested in China again by the foreign merchants, so that even if it is not in the hands of the Chinese themselves, still that is not to their disadvantage. Take Japan and Russia, for example, and see their statement of their exports and imports of goods as compared to the inflow and outflow of their wealth since they adopted a gold standard. There is convincing proof. These two countries also feared the very same thing, namely, that their exports would be small and their gold would flow out of the countries. But we can see from these countries that there is nothing to fear on this ground, which is the seventh objection raised.

Eighthly, prominent officials of some countries claim that the Chinese are fond of talking, but never do anything, and that they stick to their ancient customs so hard that it is difficult to adopt anything new. It was shown in the case of the law adopted in Tientsin requiring stamped paper for all legal documents, which law was speedily abolished, and is not in force to-day. They say that a new coinage system is a much graver and more complicated affair than that, and it will therefore be very hard to introduce. These people do not take into consideration the fact that the stamped-paper tax takes the money away from the people, and for this reason seems to them not to be to their advantage. Still, this system can perhaps be introduced gradually. The establishment of a national-currency system, however, is for the benefit of the people, being far from their disadvantage in any way, so the two things are not alike at all. The wealthy and prosperous provinces in the southeast already use silver dollars, and within the last three years the northern provinces have come to use them quite extensively. Is not this clear proof that the system can be introduced, and that it will be a permanent one? So much for their eighth and last objection.

Thus we see the folly of not using gold, as well as the advantages gained and the dangers avoided by adopting its use. Comparing and investigating the two courses, there is nothing to fear in taking the step.

Your servant now begs to suggest a new plan for China. In this plan there will be six points considered, and the first of these is: We

must adopt a fixed name and weight for our coins. All countries having a national coinage system have a special name for their coins, e. g., the English pound, American dollar, Russian rouble, German mark, and French franc. With the exception of the pound, which is only in gold, they all use silver and gold together, using two metals, but a single nomenclature. One gold piece is worth 5 or 10 or 20 silver pieces, as the case may be, and one silver piece is worth so many copper ones, and each piece has its own particular name. Having established the relative value for the coins for the whole country, no other coins will be allowed circulation, nor will there be the slightest difference in weight.

The reason for such measures will be to prevent all chances for corrupt practice. In China we use taels (ounces) of silver. These taels are merely the signification of the weight and are not the name of any coin. A piece of silver is now merely so many ounces, whereas if we had a standard coinage it would have a special name. And besides the ounce itself differs greatly in different parts of China, which only increases the chances for tricky reckoning among the Chinese themselves, and has long caused our system to be rejected by the foreigners. Once dispense entirely with the name "tael" and introduce a national uniform coinage for the whole country, and our financial relations at home and abroad will have stability. The American commissioner at the time of the conference called our prospective new coin a "tael," but that was only because there was no new name for it and he used the old one temporarily; it was not that he thought the new coin must of necessity be called a "tael." We call our copper coins by the name of "wen" and our silver ones by the name of "yuan." We call our silver pieces "yuan" because they are round, and "yuan" means round.

For the same reason copper cash were called "yuan" in ancient times. The northern and western provinces use the tael system and their business is comparatively small, whereas the southern and eastern provinces use dollars (yuan) for the most part, and their business is large. So it would be for the convenience of all to have a new coin and call it "yuan," and moreover this measure would lead to great benefits. In Hupeh they formerly used taels, but from the time that silver dollars came into use the pay of the soldiers, the salary of the officials, and the school expenses were every one of them paid in dollars. They have used this system there for the past five years and pronounce it most advantageous. If one province finds such to be the case, then others will come to the same conclusion.

As to the weight of the new coin, the Government should take into consideration the weight which the people are in the habit of using as well as the general standard of other countries, and then make regulation by law. After a thorough investigation of the state of affairs both at home and abroad, it is my opinion that we should decide upon the now generally used weight of 0.72 ounce (as in the Mexican dollar) as the standard to be adopted and adhered to, and not retain the useless and uneven tael system. According to the new system 1 yuan would be worth 100 small cash, which would be a very simple system in exchange. Your servant discussed this matter with Mr. Jenks, of the United States Monetary Commission, and he also thought this plan the best, because a dollar weighing an ounce would

be too heavy and too large, and, besides, no country has such a coin in use, nor, for that matter, is there any such coin in use in the Chinese market. If China really adopts a coin of the weight of 0.72 of an ounce, it will be more convenient and bring much better results. Mexico is now considering the adoption of a coin worth just half of an American gold dollar. The new coin is to be of the same weight as the Mexican dollar, which has long been in use in China.

If we adopt such a coin as this, having a definite value with relation to the American dollar, then it will have a definite value with relation to the coins of every other country, because the American dollar itself has a definite relative value with the coins of other countries. The matter of exchange then will be perfectly simple and also definite, which will be most beneficial. If our coin then has a definite name and weight, we can arrange a table of values relative to gold. For example, 10 silver yuan can be worth 1 large gold coin and 5 silver yuan can be worth 1 small gold coin. We can also coin fractions of the unit and have coins of one, two, and five tenths of that value. Then we can divide these up into copper coins and have the small silver 10-cent piece worth 100 cash. We can continue to use the copper coins now in circulation and will not need to coin new ones. We can add new ones, however, of 5, 10, 20, and 50 cash value for convenience and to accord with the system.

After deciding upon the name and weight, we must consider, secondly, the amount of money to be coined. Every nation must have a certain amount of money in circulation. This depends upon the number of inhabitants and their standard of living. Statistics show that on a conservative average Americans spend in one month $15 per man, Frenchmen spend 100 francs, and Germans spend 28 marks. The Chinese, according to the experts, are an economic people, and an average of $2 per man is enough. That being the case, the coinage for the whole country should be limited to 800 million dollars, and we could at first coin only a quarter of that amount, or 200 million dollars. Of this 200 million dollars 15 per cent should be made into gold coins and the rest into silver pieces. In every $100 there should be one gold coin of $10 value and one of $5 value. The remaining $85 out of the $100 should be made into silver coins.

Then, as to the place for the mint. All who have given the matter any consideration say that a central and important place should be chosen, and that there should not be a mint in each province. The important matter, however, is the establishment of a uniform method at the chosen mints, and not so much that we should have a single mint. Russia formerly had her coins made in Germany, and several countries at first entrusted the making of their coins to other nations. What we want is that the mint shall be in a convenient place, the artisans be skilled men, and that the coining be done rapidly. China's first silver coining establishment was set up at Canton; then another was establish in Hupeh, both at the instigation of Chang Chih-tung. Other provinces then followed suit and erected mints, putting out coins with the name of the province stamped thereon. Now, if a change is made and coins of one kind only are manufactured, it is still possible to have branch mints in each province in order to hasten the coinage, as well as to facilitate getting the coins into circulation.

The mixing of alloy must be done according to the principles of

chemistry. The mold must be finely engraved. The design must be decided by imperial decree, so as to insure a uniform coinage and prevent counterfeiting, for if the coin is to be worth more than the actual amount of silver therein, counterfeiters of the coin themselves must be made to suffer and not the ignorant users of counterfeit money. As to deciding upon a design for the coins, the Chinese have always used the dragon as their symbol, and it would be well to stick to it. Then the date could be engraved upon the coin, but not necessarily the name of the province, so that there may be no apparent difference in the coins to outsiders, and the coins may have free circulation everywhere. If it is desired that the coins of each province should have some means of being recognized, some mark or sign could be made in the design or in a stroke of the design, that the coin may be recognized on close inspection at the mint where it was made.

The third thing to be considered is this, when the old silver coins are called in and the new silver coinage decided upon, all coining of the old kind must be stopped and the old money be taken in by degrees for recoining. The output of the new coinage will then increase daily and its use also be extended day by day. For the first few years, in taking back the old coins, the Government can not but give the full market value of the same, in order to give the people assurance in the matter; but after ten or more years the coins can be bought at the rate of ordinary silver and it will not be necessary to consider them at their coin value. Moreover, the new coins will be 92 per cent pure silver, and the remaining 8 per cent, which will be alloy, will be the nation's just seigniorage, so that the more money we coin the more of this surplus will we obtain. With this surplus the Government can not only pay its debts and the cost of coinage, but it can also store up its gold reserve. If all the 800 million dollars are coined, the surplus will amount to 64 million dollars. Such a system must prevent, as it does in other countries, the importation of foreign coins for domestic use, and the deserved seigniorage will then revert to the country making the coins and can not be taken away by foreigners. As China heretofore had no fixed coinage system, she was forced to make use of the Mexican dollar and the seigniorage went into foreign pockets and became an excessive drain upon China's wealth, although there are but few people in the country who realize the extent of the injury. Then, too, China is now in close connection with other nations by railroad and steamship, and if we do not soon take measures to prevent it, it will not be Mexico alone who is lying in wait to encroach upon our sovereign rights. For this reason the adoption of a new system should be pressed the more vigorously.

Fourthly, we must consider from whence is the capital coming with which we are to start the new coinage. When a nation starts a new monetary system, it first decides upon the amount of money to be coined, then it decides upon the time of putting the new coins into use. In the meantime while the amount of money coined is insufficient and the time for beginning its use has not arrived, it is evident that the old silver still in circulation and the gold and silver in use in trade can not be included in the capital for the new coinage. Where, then, have we all the necessary money stored away? When a nation starts a new system of coinage, do they not always count upon bor-

rowing the money first? With two indemnities on her hands already, it is assuredly not easy for China to speak of borrowing money; but to borrow money for a coinage, when the money will stay right within the country, is a transaction which will benefit the country; it is not in any way like borrowing money to pay debts, where the money goes into the hands of another. Now the coins for such a great system as this can not all be made in a day, and we should first decide how large a loan we wish to make and then borrow a certain portion each year, borrowing only as much as we can coin, and thereby reducing the amount of interest we must pay. So, if we decided to coin 200 million dollars, we can divide it up and first borrow 15 million dollars gold, and with this amount buy 30 million ounces of silver bullion.

With this we can coin more than 30 million dollars, and with the new coins buy silver bullion again. Thus we can buy and coin, buy again and coin again, and so on in an endless circle, gradually making up the whole amount decided upon to be coined. But in making this loan we should consult with the prominent business men of the various nations, and not drag the nations themselves into the affair, for merchants are always solicitous for the security of their interests, and will necessarily desire that China have no setbacks, but be at peace. The Governments themselves, however, secretly wish us to have trouble and to become involved. Therefore a commercial citizen thoroughly acquainted with financial affairs should be selected and appointed by the throne to proceed as a special deputy to the different great nations and investigate the whole question thoroughly, discussing the matter with the prominent business men and financiers of the world. At the same time he can inquire into the business methods of the various countries and look for an opportunity to make the loan. But he must not, by any means, borrow through the officials of any country or allow any foreign Government to have any interest in the loan. This is an important matter which must be managed with care.

Fifthly, let us consider the matter of putting the new coins into circulation. This is a matter which rests entirely with the Government. When the Government has decided upon the date upon which to put the new coins into circulation, they should pay all the officials' salaries and soldiers' remunerations, etc., in the new coins. If, at first, the usage in the general market is not extensive, then the Government can make regulations requiring that the new coins be used in making payments due the Government. When the provinces send in their returns they should be required to send them in the new currency. The customs offices should accept no duties unless paid according to the new system. Thus it can be pressed upon the people gradually until in each province it can be made a rule that all collections, etc., above a certain sum must all be paid in the new coins. When the populace sees the great advantage of the new system, how easily it is reckoned, and how it puts a stop to the "squeeze" of the various kinds of money sharks, will they not realize what a nuisance the old system was and gladly adopt the new one? The eastern and southern provinces favored the use of the Mexican dollar for these very reasons, and the longer they used it the further its use spread. Suppose some one says that the new coin is not really worth its face value and hence it is not to be expected that the people will take any

stock in it. Just let such a person know that the old silver, though full weight, will not purchase goods in the market, whereas the new coins, although they are only 92 per cent pure, are current everywhere and that this is the case because the authority to put a new coin into circulation and to put a stop to an old one, rests with the Government alone.

Lastly, we must make the people have faith in the new system; the people of China as well as the people of foreign nations must have confidence in it. Your servant has already discussed the subject of how we should give our own people confidence, and now as to the people of other countrries. When the new system is put into operation, we should take the gold we have borrowed and deposit it among the various foreign banks, thereby letting all nations know that we have some gold in reserve. A statement should be made of the money taken in and the output of the mint each year, and this statement should be forwarded to the foreign ministers in Peking. This is also in harmony with the general method in other countries. It is evidence of the way in which things are being done, it clears away all suspicion of fraud, and it insures trust in us throughout all the world. If the reports of the Chinese imperial customs were not published in this way each year and distributed at home and abroad, who would put any faith in that system?

The above six suggestions for a monetary plan are merely what your servant has gathered from time to time from foreign books treating of methods of financial administration. They comprise what he has seen and heard in his travels of the last ten or twelve years in Europe and America, as applied to the present situation in which China finds herself in relation to other nations. The whole matter shows lack of extensive investigation and thought upon the subject of the best course for the nation to pursue in its effort to decide upon a firm financial policy. As to building up the wealth of the country and establishing special schools upon these subjects for the benefit of future days, these matters are certainly worth early consideration or else this will be another case like the Chinese customs which has brought us ridicule because it has long been managed by foreigners and still no one has come forward who is able to take over the work.

The plan I have suggested would be a method of constant self-protection and a never-ending benefit. In that the United States commissioner, Mr. Jenks, (who) is now coming to China, it is my humble opinion that the Throne should appoint some high official thoroughly versed in financial matters to confer with him on these important international financial questions. As the day of Mr. Jenks's arrival is near, I have used what little ability I possess in composing this memorial, displaying as little ignorance as possible, in the hope that the official who shall receive such appointment may find some matters that may be useful. I humbly beg that the Throne will decide whether or not my suggestions are practicable, but I greatly fear lest they prove to be of no use.

In view of the fact that the United States Monetary Commissioner will shortly arrive in China to investigate the coinage question, your humble servant has with all due respect prepared this very slight contribution in the form of a memorial, which he craves may be given the favor of the Imperial glance.

(*b*) MEMORIAL OF THE BOARD OF REVENUE IN RE SALE OF OFFICE TO RAISE FUNDS FOR A GOLD RESERVE.

We have made further investigation of the suggestions submitted by Hu Wei-tê, the minister to Russia, in his memorial on the reform of the currency, in which he asks that gold coins may be issued in addition (to silver). His report as to the advantages and disadvantages is very thorough. Recently there have been numerous discussions of the financial administration which have suggested that China ought to coin gold to relieve the situation caused by the depreciation of silver. We, your ministers, have taken pains to investigate the subject very carefully, and find that at present all the nations on the globe, except China, have a gold coinage; that gold is dear and silver cheap, and that on this account trade suffers much injury, and that without the coinage of gold it will be impossible to prevent it; but a supply of gold must first be obtained before there can be a gold coinage. When Japan was about to adopt a gold coinage, she first collected gold for ten years before proceeding to mint it. A great deal of gold is hoarded by the Chinese people, and simply because the government does not use it, it is unnecessarily wasted in the manufacture of gold vessels and ornaments; besides not a little in recent years has been exported to other countries. It becomes very necessary, therefore, to adopt some method to secure a reserve of gold which may meet the demand for minting purposes.

As to this matter we find that the memorial of the bureau of national administration has already received the sanction of the Throne, and is to the effect that they propose that persons who wish to purchase restoration to lost rank and those who desire to purchase promotion, as well as those who want to be advanced on the list of expectants by making subscriptions and thus secure the right to an earlier appointment to fill a vacancy, shall be required to pay one-half of the sums respectively required in gold, Treasury standard, at the rate of 1 ounce of gold for 32 ounces of silver; that, as to the application of the rule, as those who are to purchase restoration to rank are to be permitted to purchase only the former rank and nothing above it, they still more ought not to be allowed to purchase the right to return to the particular post formerly held, and that the privileges accorded under this rule are not to be allowed in cases in which removal has been for comparatively serious offenses; that in the case of those who have never had official appointments and desire to send in large sums of money, they ought first to report at the board of revenue, which should take the matter into consideration and fix the amount to be paid (for the rank), all to be paid in gold, after which the board should request an edict, and if the Imperial sanction should be given the board of revenue should then receive the gold.

It seems to us that by agreeing to the proposal under these restrictions it may perhaps be possible to accumulate the gold.

As in duty bound we have prepared this supplementary report and respectfully submit it, humbly praying the favor of the Imperial glance.

Imperial rescript received: "Let it be as proposed." "Respect this."

(c) Memorial of the Financial Commission in re Establishment of a National Bank.

This memorial proposing that the board of revenue should make trial of a national bank so as to facilitate the circulation of silver coins and thus aid the financial administration and increase the sources of wealth, is reverently submitted, with a prayer for the favorable consideration of your majesties.

Some time since, we, your ministers, presented a memorial, suggesting that a mint should be established at Tientsin for the coinage of silver. The erection of the buildings has already been begun, and as soon as the machinery, which has been purchased, shall arrive, minting will at once begin, and thus form the commencement of the reform of the financial administration; but the purpose in this present coinage is by a reform of the monetary system to secure the general circulation of the coins, to call in the silver sycee heretofore used and gradually coin it, as well as to issue paper money and to coin gold. The important factor in this arrangement will be the use of the money by the treasury in receipts and payments, and it becomes more than ever necessary to establish a bank to aid in the circulation; only so can the scheme be put into operation without hindrance. Heretofore China has had no bank; although the institutions which issue notes and the cash shops established by wealthy persons in all the provinces are of the same character as banks, yet no Imperial bank has ever been established to form a bond of union among them, and thus it has been impossible to depend upon them in distributing the Government's surplus or making up its deficit. This condition of affairs has long been comprehended by your majesties.

Some time ago the expectant metropolitan official of the fourth bank, Mr. Chang Yu-nan, of Canton, requested permission to raise shares among the Chinese merchants of the south and establish a mercantile bank in Peking, and requested that the treasury might be instructed to contribute part of the capital stock. Your ministers also memorialized recommending the approval of the scheme, as the files will show. But the aforementioned gentleman has gone to the south to raise shares to carry the plan into operation and has fixed no date for the commencement of the enterprise, and the time has now come for the reform of the monetary system, and the establishment of a bank to promote the circulation of the coins is a matter of urgent importance. Your ministers have consulted together frequently about the matter and now propose that the board of revenue shall first take steps to accumulate the necessary capital, examine the regulations of the various foreign banks and select such as are suitable, giving careful consideration to the various advantages and disadvantages, and proceed to operate a bank experimentally, that it may furnish the necessary channels for the circulation of the coinage. The detailed regulations will be drawn up and submitted in a memorial by the board of revenue.

Your ministers respectfully submit this memorial stating the reasons why the board of revenue should make experimental trial of a bank, praying that your Imperial majesties will consider and decide whether or not the scheme should be put into operation. This memorial was submitted on the 28th of the First Moon, XXX year of

Kuang-hsu, and an imperial rescript issued saying: "Let it be as proposed."

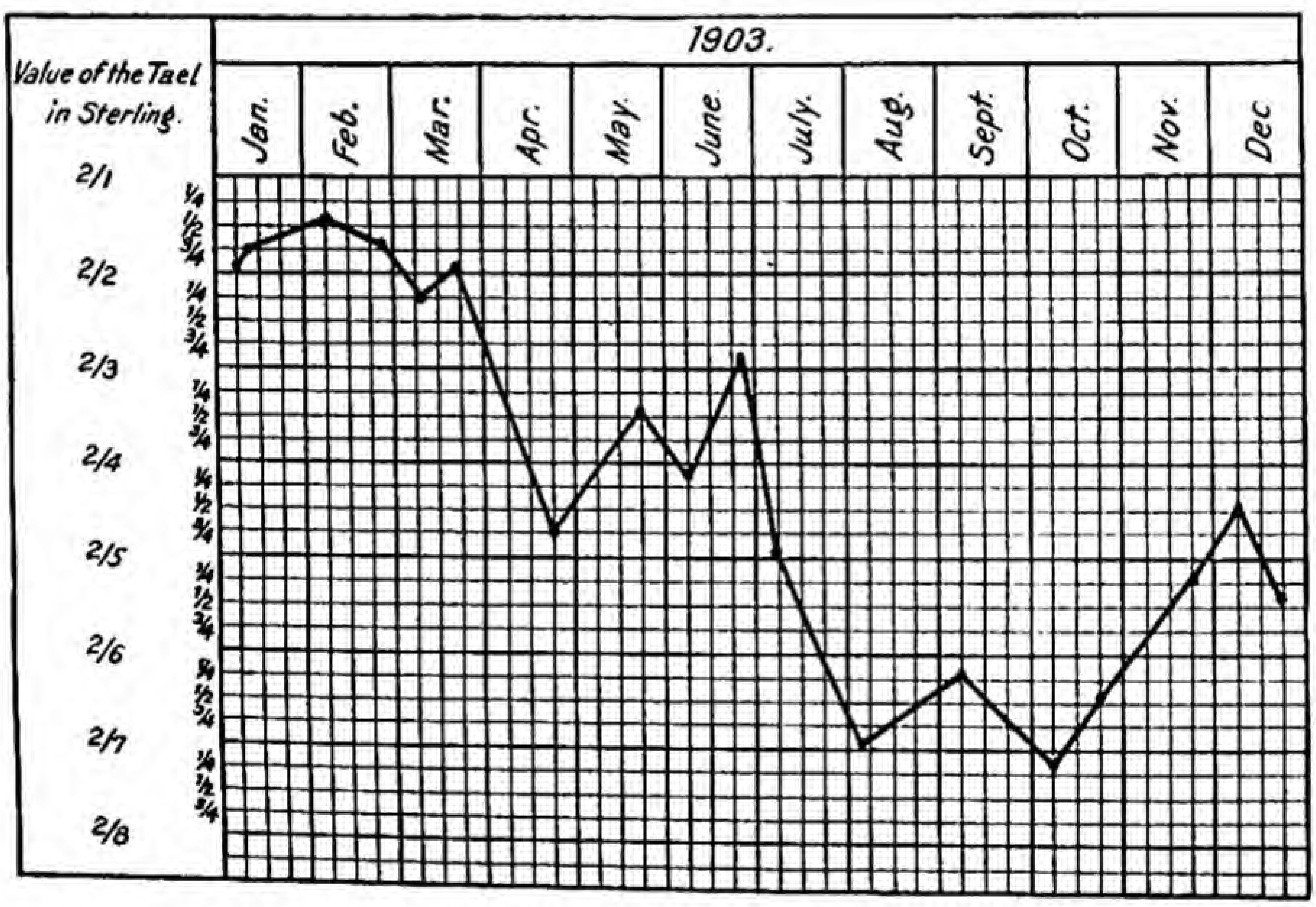
"Respect this."[a]

3. EXTRACT FROM REPORT ON THE FOREIGN TRADE OF CHINA FOR THE YEAR 1903, BY MR. J. W. JAMIESON, COMMERCIAL ATTACHÉ, TO HIS MAJESTY'S LEGATION IN PEKING.

[No. 3280. Annual series. Reference to previous report, Annual Series No. 3092.]

[Shanghai, July 9, 1904; received at foreign office August 15, 1904.]

The average rate of exchange for the Haikwan tael in 1903 was 1.3 per cent higher than in 1902, and the chart will serve to illustrate the tortuous course it pursued in its progress upward. For the first six months the average rate worked out to 2s. 6d., against 2s. $9\frac{1}{5}$d. for the last six months, a difference of $10\frac{1}{2}$ per cent, with quotations, as a rule, below the parity of silver.



CHANGE OF STANDARD.

On January 22, 1903, the Chinese chargé d'affaires handed to the Secretary of State at Washington a note, accompanied by a memorandum, wherein the Chinese Government, acting in concert with the Mexican Government, invited the cooperation of the United States in seeking some remedy for the serious losses inflicted on the commerce of both gold and silver standard countries by fluctuations in the value of silver bullion.

This note was preceded by one couched in similar terms, addressed to Mr. Hay by the Mexican ambassador on January 15, and on January 29 President Roosevelt transmitted to the Senate and House of

[a] Acting under the aforementioned memorial, approved by the Emperor, certain bank regulations were drafted and an official designated to secure private subscriptions to the capital stock of a new bank. After several weeks spent in explanations to business men by the official no subscriptions were secured, and the project, in the original form, at least, seemed to be abandoned when the American commissioner left China in September, 1904.

Representatives a message recommending "that the Executive be given sufficient powers to lend the support of the United States in such manner and to such degree as he may deem expedient to the purposes of the two Governments."

Acting thereon, both Houses of Congress passed an appropriation, enabling the President to cooperate with the Governments of Mexico, China, and other countries for the purpose set forth in the message, and a commission of international exchange, consisting of Mr. H. H. Hanna, Mr. C. A. Conant, and Prof. Jeremiah W. Jenks, was appointed. The Mexican Government appointed two commissions, one to make careful examination of local conditions in the City of Mexico, the other to procure an understanding with other interested countries as to the best means of carrying out the end in view.

The Mexican and United States commissions then approached the leading powers having commercial and financial relations with silver-using countries, and after their approval of the principle involved had been secured, Professor Jenks came on to China to lay the commission's proposals before the Imperial Government, and to make arrangements with regard to the practical steps to be taken to place China's currency on a gold basis.

He has of late been engaged in interviewing the high authorities of the metropolis and the provinces, and has been greatly encouraged by their sympathetic attitude. It is open to question, however, whether the able representations of the learned professor in person, or his lucid explanatory statement in writing, have really enabled those addressed, who, it has to be remembered, are without any previous training in the science of economics, to grasp in all its bearings a complicated problem which has perplexed financial experts for years.

The lines on which it is sought to bring about an amelioration of existing conditions are, as expressed by Sir Robert Hart, such as will insure a uniform exchange between gold and silver, eliminating all danger of uncertain fluctuations while permitting China to retain a silver currency, and the American Commission consider that in starting the new system, the wiser, and in the end the easier plan, would be to introduce new coins, silver and copper, on a gold basis, and from the beginning to maintain them at a parity with "a standard unit of value, not necessarily coined, consisting of a fixed number of grains of gold of a fixed degree of fineness, approximating to the monetary unit of a country with which China's commercial relations are close and increasing."

The bullion value of the current silver coin representing this unit should, it is suggested, be 10 or 15 per cent less than the parity value. To maintain it and its subsidiary units on a parity with gold, the principal measures recommended are the following: (1) Strict limitation of the amount of coinage and absolute governmental control thereof; (2) a normal steady demand on the part of Government for this coin and a readiness to receive it for payments due to them; (3) making the coin legal tender in payment of private, as well as of public debts; (4) an agreement on the part of Government to redeem the silver coin by the payment of gold, practically on demand.

For the satisfaction of all proper business needs it is held to be sufficient if the Chinese Government keep a gold credit in Europe, against which they could sell bills of exchange whenever a legitimate market demand arose.

The necessity of making provision at the outset for the accumulation of a gold reserve, which will suffice at all times to maintain the parity of the new coins, is strongly insisted upon. To the question, "How may this gold reserve be accumulated?" the commission answer: (1) That on silver coins, substantially equal in value to the Japanese yen, at the present price of silver, there would be a profit from seigniorage of some 8 to 12 per cent, and that the profit on minor subsidiary coins would be much greater, which profits would all have to be employed in purchasing gold. (2) That the saving effected by any concession, such as the postponement of redemption in gold granted by the treaty powers in respect of indemnity bonds, would have to be devoted exclusively to the requirements of the new monetary system. (3) That if the scheme is to be carried through promptly in the most important trade centers, gold to a considerable extent must be borrowed against the security of certain specific revenues, and that the proceeds of this loan, part of which might simply take the form of a gold credit, to be drawn against as circumstances called for, must be placed on deposit in Europe and America.

After the establishment of the reserve provision must naturally be made for its replenishment, and this might be done by means of an agreement on the part of the controller of the currency in China to honor silver drafts drawn against the Chinese Government by its agents abroad in exchange for gold deposited in the fund. It might also be possible to obtain supplies by an exploitation of the gold mines within the Empire.

An issue of bank notes payable in the new currency is also contemplated, and is, in fact, essential in order to impart elasticity to the system.

It does not appear that in the new scheme due weight has been given to the claims for consideration which might be set up by the domestic trade of the country. The area of the 18 provinces equals that of the whole continent of Europe, less Russia, the Balkan States, Turkey, and Greece, and the trade carried on among themselves by 343,000,000 of people, is by no means one to be left out of account. So largely, however, looms the injury to the foreign trade in the eyes of the currency reformer, and so imperative appears to him the necessity of China's meeting her foreign obligations in gold, that in the scheme as it stands native trade has been treated as practically nonexistent. It is dismissed in one short sentence, which, while acknowledging that a national silver currency, not on a parity with gold, would be very advantageous to the internal trade of the country, goes on to state that the import and export trades would be helped directly in no way by such a system, inasmuch as the only benefits which the trade with foreign countries could expect to reap would be indirect ones arising out of an expansion of domestic trade. In the course of the discussion which took place between the commissions of the United States and Mexico, the former handed to the latter a memorandum dated April 18, 1903, reviewing the statistics of the foreign trade of Mexico inward and outward. It was therein sought to demonstrate that the fall in the gold price of silver had inflicted on Mexico a very considerable economic loss, inasmuch as it appeared that on the one hand a given amount of gold purchased fewer foreign products than in former years, while on the other hand Mexican products were being disposed of in increasing quantities at prices which, converted into gold, showed no advance whatever.

To illustrate the argument a series of figures was adduced comparing the gold prices of imports and exports in the years 1893 and 1902, and in order to ascertain to what extent China has suffered from the same cause, the figures of her foreign trade might be submitted to a similar process of investigation. The results, however, can only afford approximate indications, as the system of valuation adopted by the Imperial Maritime Customs has hitherto been far from perfect, and the data for an extended comparison are for various reasons by no means complete.

The following table gives the values in silver and in gold of China's exports since 1883, and shows an increase in the course of those 20 years of 205 per cent in silver and of 43.5 per cent in gold, accompanied by a decline in the gold price of silver of 53 per cent. In the first decennial period the rises were 66 and 27 per cent, respectively, and the fall about 30 per cent:

Market value of exports from China (excluding treasure).

Year.	Value.		Rate of exchange.
	Currency.	Sterling.	
	Haikwan taels.		*s. d.*
1883	70,197,700	£19,669,980	5 7¼
1888	92,401,100	21,705,020	4 8¾
1893	116,632,310	22,961,985	3 11¼
1894	128,504,520	20,483,370	3 2¾
1895	143,293,210	23,434,410	3 3¼
1896	131,081,420	21,846,905	3 4
1897	163,501,360	24,254,890	2 11¼
1898	159,037,105	22,944,420	2 10¼
1899	195,784,830	29,469,695	3 0¼
1900	158,996,750	24,667,620	3 1¼
1901	169,656,760	25,095,060	2 11¼
1902	214,181,585	27,843,605	2 7½
1903	214,352,470	28,245,225	2 7¼

The question now arises, have the quantities of Chinese produce sent abroad corresponded with the rise in the total silver value, or have higher silver prices obtained for exports contributed toward the maintenance of their gold value?

To assist in determining this point, examination has been made of the quantities and values of certain staple exports in the years 1893 and 1903. The four articles selected—tea, silk, bean products, and raw cotton—constituted 66 per cent of the total value of exports in 1893, and 58 per cent of the total value of exports in 1903, and the difference between the gold price of silver in 1893 and in 1903 amounted to about 33 per cent.

Table showing quantity and value of certain staple articles of export during the years 1893 and 1903.

Articles.	Quantity exported.		Gold value.		Increase or decrease.		Value per unit.	
	1893	1903	1893	1903	Quantity.	Value.	1893	1903
					Per ct.	*Per ct.*	£ s. d.	£ s. d.
Silk ....pounds..	24,038,667	30,829,467	£7,503,740	£9,789,155	+ 28	+ 30.4	0 6 3	0 6 4
Tea ....do..	242,777,500	223,670,670	6,016,248	3,469,975	− 7.8	− 46	0 0 5.9	0 0 3.7
Beans and beancake. cwt	2,341,988	7,165,582	496,523	1,428,900	+206	+188	0 4 3	0 4 0
Raw cotton.......do...	685,892	904,190	1,213,967	1,751,840	+ 31.8	+ 44.8	1 15 5	1 18 9

Computing the quantities of 1903 at the unit price in gold of 1893, a loss of £1,816,760, or at the rate of nearly 10 per cent, appears to have been sustained. But it has to be borne in mind that the fall of 33.7 per cent in the price of tea was due to causes other than those influencing the price of silver, and that had this article been eliminated from the list, the figures, instead of showing a loss, would have shown a profit of £211,835:

Article.	Reported gold value.	Value per unit.	Gold value at unit price of 1893.
		£ s. d.	
Silk	£9,789,155	0 6 4	£9,634,205
Tea	3,469,975	0 0 3.7	5,498,570
Beans and beancake	1,428,900	0 4 0	1,522,685
Raw cotton	1,751,840	1 18 9	1,601,170
Total	16,439,870	....	18,256,630

A continuation of this process, applied to a larger range of exports in the years 1899 and 1903, gives the following results (proportion of total exports, 74 per cent in 1899; 77 per cent in 1903; fall in gold price of silver between 1899 and 1903, 12.3 per cent):

Table showing quantity and value of imports during the years 1899 and 1903.

Articles.	Quantity exported.		Gold value.		Increase or decrease.		Value per unit.	
	1899	1903	1899	1903	Quantity.	Value.	1899	1903
					P. ct.	P. ct.	£ s. d.	£ s. d.
Silk ...... pounds	37,500,400	30,829,467	£12,359,100	£9,789,155	− 18	− 20.8	0 6 7	0 6 4¼
Tea .... do	217,439,200	223,670,670	4,736,730	3,469,975	+ 3	− 26.8	0 0 5¼	0 0 3.7
Beans and beancake ...... cwt	6,322,692	10,843,840	1,417,667	1,428,900	+ 71	+ 0.8	0 4 5	0 2 7¼
Raw cotton .. do	273,880	904,190	448,605	1,751,840	+230	+290.5	1 12 9	1 18 9
Aniseed, star . lbs	1,456,800	1,011,867	36,180	18,016	− 30.5	− 50.2	0 0 6	0 0 4¼
Bristles ...... do	3,754,900	5,281,600	166,522	261,994	+ 41	+ 57.3	0 0 10.6	0 1 0
Cassia lignea . do	8,606,730	7,142,667	97,632	84,400	− 17	− 13.5	0 0 2.7	0 0 2⅝
Fans ...... per 100	57,092,168	55,081,366	93,035	73,436	− 3.4	− 21	0 3 3	0 2 8
Feathers .... cwt	84,554	69,774	146,518	136,451	− 17.5	− 6.9	1 14 7	1 10 0
Hemp .... tons	9,893	10,842	199,197	226,202	+ 9.6	+ 13.5	20 2 8	20 17 3
Hides .... cwt	277,020	288,477	591,421	621,704	+ 4.1	+ 5.1	2 2 8	2 3 0
Mats ..... per 100	32,032,500	19,057,464	207,995	140,230	− 45	− 32.6	0 12 11	0 14 8
Matting .... rolls	514,090	593,365	341,646	545,587	+ 15	+ 60	0 13 4	0 18 0
Musk .... lbs	2,588	2,355	63,053	67,668	− 9	+ 7.3	24 7 3	28 14 0
Nutgalls .... cwt	43,068	43,550	108,694	100,131	+ 1.1	− 7.9	2 10 5	2 6 0
Oils:								
Vegetable . do	287,810	500,720	308,000	428,273	+ 74	+ 39	1 2 1	0 17 0
Essential ... lbs	403,735	406,540	81,470	44,435	+ 0.7	− 45	0 4 0	0 2 2
Rhubarb .... cwt	9,493	8,813	25,378	22,572	− 7.1	− 11	2 13 5	2 11 0
Sesamum seed . do	205,356	627,490	84,100	257,492	+205	+218	0 8 2	0 8 6
Straw braid .. lbs	10,603,600	10,763,000	433,735	543,841	+ 1.5	+ 25.4	0 0 10	0 1 0
Tallow:								
Animal .... cwt	11,643	69,267	11,553	64,887	+495	+461	1 0 0	0 18 8
Vegetable . do	27,963	131,346	35,357	148,153	+370	+319	1 5 3	1 2 7
Tobacco ...... lbs	23,196,300	21,861,200	347,695	266,837	− 5.7	− 23.3	0 0 8¼	0 0 3
Wax, white .. cwt	6,830	5,080	81,307	27,187	− 26	− 66.6	11 19 6	5 7 0
Wool .... lbs	32,286,983	25,750,533	540,490	326,190	− 20.2	− 39.5	0 0 4	0 0 3
Wool, camel's . do	5,317,200	2,381,200	82,783	34,065	− 55.2	− 59	0 0 3.7	0 0 3¼

The conversion of the given quantities of 1903 at the gold unit price of 1899 discloses a loss of £2,492,230, or at the rate of 10.65 per cent:

Articles.	Value per unit.	Reported gold value.	Gold value at unit price of 1899.
	£ s. d.		
Silk .... pounds..	0 6 4⅛	£9,789,155	£10,148,832
Tea .... do....	0 3 7 1/10	3,469,975	4,846,197
Beans and beancake .... cwt..	0 2 7¼	1,428,900	2,304,581
Raw cotton .... do....	1 18 9	1,751,840	1,480,611
Aniseed, star .... pound..	0 0 4¼	18,016	25,297
Bristles .... do....	0 1 0	261,994	233,270
Cassia lignea .... do....	0 0 2¾	84,400	80,355
Fans .... 100..	0 2 8	73,436	89,507
Feathers .... cwt..	1 19 0	136,421	120,650
Hemp .... ton..	20 17 3	226,202	218,286
Hides .... cwt..	2 3 0	621,704	615,417
Mats .... 100..	0 14 8	140,230	123,079
Matting .... roll..	0 18 0	545,587	395,576
Musk .... pound..	28 14 0	67,668	57,374
Nutgalls .... cwt..	2 6 0	100,131	109,765
Oils:			
Vegetable .... do....	0 17 0	428,273	552,878
Essential .... pound....	0 2 2	44,435	81,305
Rhubarb .... cwt..	2 11 0	22,572	23,538
Sesamum seed .... do....	0 8 6	267,492	256,225
Strawbraid .... pound..	0 1 0	543,841	448,458
Tallow:			
Animal .... cwt..	0 18 8	64,887	69,267
Vegetable .... do....	1 2 7	148,153	165,824
Tobacco .... pound....	0 0 3	266,837	318,809
Wax, white .... cwt..	5 7 0	27,187	60,833
Wool .... pound..	0 0 3	326,190	429,175
Wool, camel's .... do....	0 0 3	34,065	36,710
Total	....	20,889,591	23,381,822

Applying this percentage of loss to the total value of the exports in 1903, the deficit amounts to £3,369,800.

TABLE B.—*Cost of certain imports into China in gold at the prices ruling in 1899 and 1903.*

	Value.		Percentage of change in price.
	1903.	At prices of 1899.	
Cotton yarn	£8,814,765	£8,215,120	+7.3
Plain cottons	5,525,455	4,896,865	+12.8
Sugar	2,103,320	2,364,105	−11.3
Kerosene oil	2,071,940	1,877,045	+10.3
Metals	1,993,900	1,713,125	+16.3
Coal	1,118,570	1,580,870	−30.7
Total	21,627,950	20,647,180	+4.7

NOTE.—All values are market values in silver, converted at the average annual sterling rate of the Haikwan tael.

The gold value of the above imports represents 50 per cent of the gold value of China's total imports in 1903 (£43,015,415), and, applying this ratio of rise in price to the whole amount, China is a loser by £1,950,755, at the prices of 1903, as compared with those of 1899.

Had a fall in the gold prices of her imports taken place, China might have been in a measure compensated for this loss, but, as shown above, so far from this being the case, gold prices of imports appear to have risen and to the previous loss has therefore to be added the

further sum of £1,950,755, making an aggregate loss of £5,320,555, or at the rate of 7.4 per cent on the whole value of her foreign trade.

The total weight of the exports of 1903, compared with that of those of 1883, shows an increase of 174 per cent, and compared with that of the exports of 1899, an increase of 11.28 per cent.[a] Curiously enough, this increase in the percentage of the quantities exported in 1903 over those of 1899 closely corresponds with the percentage of loss (10.65 per cent) shown to have been sustained by the calculation of their value in terms of the gold unit price of 1899.

Assuming the above to be an accurate method of gauging the country's economic gain or loss, the two years cited afford an excellent basis of comparison, as prior to the disturbances of 1900, 1899 was the most prosperous year China's foreign trade experienced, and although not conducted under ideal conditions, the trade of 1903 was the largest so far on record.

But it is hardly necessary to point out that changes in prices are not solely the result of fluctuations in the relative values of gold and silver. A variety of other elements are contributory thereto, and the part they may have played in bringing about the present situation must not be overlooked. The "Economist" newspaper's total index number, for instance, on January 1, 1899, stood at 1,918, as against 2,197 on January 1, 1904.

While, prima facie, this analysis of her foreign trade returns makes it seem certain that China has to no small extent been adversely affected by the fall in the gold value of silver, and provides an argument in favor of the introduction of remedial measures in the shape of a stable currency on a gold basis, the crucial point, deserving earnest and careful attention is this: Would it be consulting China's best interests, or the contingent interests of those who trade with her, to force upon her prematurely a scheme of monetary reform, which, while holding out the prospect of temporary relief as far as the discharge of her foreign obligations is concerned, might conceivably end in subjecting her people to heavier taxation, or which, by seriously hampering her interprovincial trade, might eventually curtail her purchasing capacity?

That currency reform is of vital importance and urgently called for is by no means disputed; the divergence of opinion arises as to the mode of carrying it into effect, and it is yet again contended that a coinage on a silver basis must be in actual circulation throughout the Empire before any attempt to place it on a parity with gold is likely to prove expedient or successful.

In connection with currency, the continued appreciation of copper cash, expresed in terms of silver, is worthy of note. It is on the Central Yangtzu that this grievance is more particularly felt, and the ever increasing number of 10-cash pieces, turned out by local mints, does not seem to afford any relief. At I'chang the purchasing power of silver decreased during the year by 6 per cent, at Hankow by 4 per cent, and Kiukiang by 6 per cent.

Another feature of internal currency is the premium, alluded to last year, on a particular issue of Carolus dollars, which in 1903 rose to 50 per cent.

[a] The articles returned in units of pieces show a decrease of 16 per cent.

IV. DATA REGARDING THE PRESENT CURRENCY IN CHINA.

1. EXTRACTS FROM SPECIAL REPORTS OF THE IMPERIAL MARITIME CUSTOMS.

(*a*) REPORTS ON THE HAIKWAN BANKING SYSTEM AND LOCAL CURRENCY AT THE TREATY PORTS.—V. OFFICE SERIES. CUSTOMS PAPERS NO. 12.

INSPECTORATE-GENERAL OF CUSTOMS,
Peking, 8th December, 1877.

SIR: I have to request that you will furnish me with information on the following points in connection with the payment of duties at the Haikwan Bank:

1. Who is the customs banker at your port? Is he an official or engaged in trade? What is the staff employed? How is the expenditure provided for?

2. In what currency are duties paid at your port? In sycee or dollars? If the latter, at what rate, and in what way was it fixed?

3. What proportion does the Haikwan tael bear to the ordinary local tael, and to the Kweip'ing tael of Shanghai? What constitutes Tsu-sê-wên-yin (the standard of payment)?

4. Are the rates for Chinese merchants the same as for foreigners? If not, why not?

5. Does the present system work satisfactorily? Are there any complaints? Have you any suggestions to make?

You will please give to this inquiry your best attention, and see that the information you collect is reliable and as complete as possible. You will forward copies of any dispatches or agreements relating to the currency question that may be found in your archives or be otherwise procurable.

I am, sir, your obedient servant,

ROBERT HART,
Inspector-General.

The COMMISSIONERS OF CUSTOMS.

CUSTOM-HOUSE,
Tientsin, February 6, 1878.

SIR: I have the honor to acknowledge the receipt on the 10th ultimo of your circular No. 32 of 1877, calling for a report on "The Haikwan banking system and local currency," and to tender, in conformity with your instructions, the information obtained on the subject.

Ad. 1.—When this port was thrown open to foreign trade, the then Imperial commissioner, Chung How, appointed a Tientsin merchant of the name of Pang Tsze-kang, customs banker. During the 7th year of Tung Chih, Pang Tsze-kang failed in business and shortly afterward died. It is generally understood that on this occasion the Imperial commissioner lost 40,000 taels, which he never was able to recover.

The next banker employed was Sung King, formerly comprador in the firm of E. D. Sassoon & Co. During the 12th moon of the 13th year of Tung Chih, this man's appointment was cancelled by the then superintendent, Sun Shih-ta, on the ground of unjustifiable exac-

tions from duty-payers. His successor was a Cantonese of the name of Chên Pei-chu, who resigned during the 6th moon of the 3rd year of Kuang Hsü, when Li Chao-t'ang, the present incumbent of the superintendency, transferred the Customs Bank to Chên Tê-kuang, likewise a Cantonese merchant, and formerly comprador to the firm of Russell & Co., who, under the style of Yü Fêng, trades in opium. Chên Tê-kuang employs in connection with his banking business, one linguist, two accountants, two cashiers, one assayer, one whipper-in (*i. e.* an employee whose specialty it is to press for payment such duty-payers as have a credit with the bank), and seven servants, as carters, cooks, etc. In addition to the salaries and wages of the above staff, the banker has also to pay two deputies, supposed to control his proceedings, but who—if the superintendent and banker are on good terms, as at present is the case—seem to have nothing to do but to draw pay issued to each at the rate of 20 taels a month.

The banker's profits are derived from the difference in the rates at which he is allowed to collect in local currency the ought-to-be Haikwan weight of sycee, and to make remittance of duties collected to the superintendent. The total gross profits thus derived by the banker here vary from 5,000 to 6,000 taels a year, while his expenses for the same period are estimated at 3,000 taels.

Ad. 2.—Duties may be paid either in Hang-p'ing Hua-pao taels or in dollars. When paying duty, foreign merchants are charged per hundred Haikwan taels, 105 Hang-p'ing taels; while Chinese are charged 106 taels and 5 candareens, or 1.05 taels per cent more than foreigners. By virtue of an agreement entered into by the former imperial commissioner and the then British consul, Mr. Mongan, the Mexican dollar is taken in payment at the uniform rate of 7 mace Hang-p'ing weight, independent of the market quotations. An attempt was made by the banker, Sung-king, to upset this arrangement and to calculate dollar payments according to the changing rates of the day; this however was unsuccessful, so that at the present moment the above-mentioned agreement holds still good.

Ad. 3.—One Haikwan tael is equal to 1 tael 5 candareens Hang-p'ing currency, and 1 Hang-p'ing tael is equal to 1 tael and a fluctuating number of candareens Kwei-p'ing currency; the nearest average valuation would be to put down 100 Hang-p'ing taels as equal to 104 taels and 5 mace Kwei-p'ing currency. By the term tsu-sê-wên-yin (the standard) is understood first-class pure sycee, such as is claimed and accepted by the Government treasuries. This pure sycee is called at Tientsin T'ou-pai-pao.

Ad. 4.—It has already been stated that Chinese merchants are treated on a different footing from foreigners, and that they pay per 100 Haikwan taels in local currency 106.05 taels, while foreigners pay only 105 taels. I have tried to find out the motive for this striking inequality, but failed to meet with any other reason for it than that the superintendent, in order to have an inexpensive system of banking, must allow this exaction, having no other inducement to offer the banker. In this connection it is necessary to state, too, that Russian merchants were until very lately specially privileged, inasmuch as their duty payments were made at the rate of 103 taels local currency per 100 Haikwan taels. Representations made by certain German merchants claiming the same favorable terms led to the lengthy correspondence between the various consuls and the superintendent,

of which I just received a copy, which I now forward for your information. The matter has as yet not been settled; in the meanwhile, Russian merchants have been placed on the same footing and pay—under protest and pending the ultimate settlement of the question—the rates in force in the case of other nationalities.

Ad 5.—As far as the archives of this office are concerned, there are no cases on record that give ground for serious complaints about or against the present system and working of the Haikwan Bank. But that should not be considered and taken for a proof of its perfection. Those who have undoubtedly complaints to proffer are in the first instance the superintendents of customs, who themselves, here and at other treaty ports, may at any moment be exposed to great personal losses, should—as has happened more than once—a Haikwan bank break; and in the second instance the Chinese merchants, who are not treated on the same equitable footing which is claimed and maintained by foreigners. As to suggesting improvements, I have not been long enough at Tientsin to give at present more complete and precise information on this subject, which indeed demands quite a study of peculiarities and usage; and I can, therefore, in this place only wind up with the general suggestion that if, as will sooner or later happen, the central Government is going to introduce a coinage, the customs banking business at all the ports be placed under one administration, which could thus form the nucleus for a Government bank, the want of which is now already much felt. A move in this direction would not be a loss to the majority of superintendents; on the contrary, it would free them from much anxiety, while it would put a stop to otherwise irrepressible illegalities, abuses, and consequent discussions in all quarters.

I duly inclose copy of the correspondence exchanged between the superintendent and commissioner, relating to the Haikwan Bank and its working.

I have, etc.,

DETRING,
Commissioner of Customs.

To ROBERT HART, Esquire,
Inspector General of Customs, Peking.

[Inclosure No. 2.]

Statement of the results of an inquiry into the local currency.

1. We, the undersigned, proceeded, on the 24th of April, 1878, to the Customs Bank, Tientsin, in order to ascertain, by a minute and careful inquiry—

(*a*) The relation between the standard weights for silver paid in liquidation of duties to the imperial customs, Canton, and the so-called Hang-ping—the weight used for the same purpose at Tientsin.

(*b*) The relation of the so-called 'Hua-pao compound of silver current at Tientsin, to pure silver, commonly known as sycee, or in Chinese, Hsi-ssŭ, and described as Wên-yin in the Chinese version of the treaties.

2. With a view to ascertain, *Ad A*, the difference in weights, we took with us a set of Canton weights—one for 100 Haikwan taels and

cne for 50 Haikwan taels, the former bearing the date of the 15th day of the 6th moon of the 6th year of Tung Chih, and both belonging to the chest of the accounts office, custom-house, Tientsin.

Having, by means of the scales, established the fact that the set of Canton weights in our possession correspond exactly with a set of Canton weights lately procured by the customs banker, we proceeded to compare the local Hang-ping weights with the aforesaid Canton customs weights, and found 100 Haikwan taels to equal 104.38 Hang-ping taels.

3. In order to find out, *Ad B*, the amount of pure silver (sycee) contained in the alloyed ('Hua-pao) silver, as used in trade at Tientsin, the undersigned took two shoes of 'Hua-pao silver, weighing together 105 Hang-ping taels, [i. e., the amount of this alloyed ('Hua-pao) silver which has hitherto been taken by the customs bank as the fixed equivalent of 100 Haikwan taels of sycee (pure silver)].

The 105 Hang-ping taels of 'Hua-pao silver were then taken to the crucible, melted, and refined by the ordinary Chinese process of admixing saltpeter, which substance unites with the alloy and forms a slag on the surface. After removing this, the pure silver remaining was cast into two shoes; these, when put in the scales, were found to weigh 103.81 Hang-ping taels, or 99.47 Haikwan taels.

4. The conclusions arrived at, on the basis of the above experiments, respecting the relative weight and value of Haikwan taels in pure silver, and Hang-ping taels in alloyed ('Hua-pao) silver, are—

1. That 100 Haikwan taels equal in weight 104.38 Hang-ping taels.
2. That 100 Haikwan taels in pure silver equal in value 105.55 Hang-ping taels in 'Hua-pao silver.

With reference to the latter result, the customs banker declared that the alloy, extracted from the silver by the process witnessed by us, still contained a certain proportion of silver, which might be extracted by re-melting; and that accordingly the Tientsin bankers calculated, and accepted in payment, 105.2.1.5 Hang-ping taels of 'Hua-pao silver as equal to 100 Haikwan taels of pure silver.

5. In answer to inquiries made by the undersigned, the banker further stated that shoes of pure silver, bearing the stamp of Tientsin banks, may be bought in the money market, and that he is willing to take them from foreigners in payment of duties, according to the Canton Haikwan weights.

DETRING,
Commissioner
H. B. MORSE,
Assistant Accountant.

CUSTOM-HOUSE,
Tientsin, May 13, 1878.

No. 59.
I. G.

CUSTOM-HOUSE,
Tientsin, May 25, 1878.

SIR: In continuation of my dispatch, No. 52, of the 13th instant, "inquiry into the local currency," I have to report that I availed myself of the presence of the Hu-Peh mining engineer, Mr. Crookston, to secure an analysis of the 'Hua-pao silver current at Tientsin. I now inclose copy of a letter from him, giving the result of a so-called "wet" analysis made in the laboratory of the arsenal.

Taking the amount of alloy as given by the analysis at the customs bankers on the 24th day of April, viz, 1.14 per cent, it would require 105.55 Hang-ping 'Hua-pao taels to equal 100 Haikwan taels of pure silver. On the basis of Mr. Crookston's analysis, giving 2.16 per cent of alloy, 106.69 Hang-ping 'Hua-pao taels would equal 100 Haikwan taels of pure silver.

I have, etc.

DETRING,
Commissioner of Customs.

ROBERT HART, Esq.,
Inspector-General of Customs, Peking.

[Inclosure.]

Mr. Crookston's analysis of 'Hua-pao silver current at Tientsin.

TIENTSIN, *May 24, 1878.*

G. DETRING, Esquire,
Commissioner of Customs, Tientsin.

DEAR SIR: The sample of silver, marked "'Hua-pao silver, current at Tientsin," which you sent me on the 22d instant, I have carefully analyzed, in accordance with your request, and now beg to submit you the result, which is as follows, viz:

	Per cent.
Pure metallic silver	97.84
Impurities	2.16
	100.00

Yours, faithfully,

A. W. CROOKSTON.

No. 19.
I. G.

CUSTOM-HOUSE,
Ningpo, February 12, 1878.

SIR: In accordance with the instructions contained in your Circular No. 32, of date 8th December last, I have the honor to report as follows respecting the "Haikwan banking system and local currency:"

1. The customs banker here is the well-known Hu Kuang-yung, or Hu Taotai. He is a Taotai by purchase, and has a Fantai's brevet rank, but he is engaged in trade, being interested in several different establishments—banks, pawn shops, medicine shops, etc. The staff employed is as follows:

One resident manager; salary and perquisites about $2,400 per annum.[a]

One assistant manager, who is chief accountant; salary, etc., $1,200 per annum.

Two assistant accountants; salary of each, $450 per annum.

One treasurer, receiving about $300 per annum.

One bookkeeper, receiving about $300 per annum.

Six writers or clerks, receiving each about $200 per annum.

One learner; salary, $60 per annum.

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[a] Silver dollars equal to the Mexican dollar in value.

Three coolies and one cook, each receiving about $60 per annum.

The total thus received as salaries by the staff at the bank is $6,600. Food, fuel, and oil for a year amount to about $1,500. The building is the property of Hu Taotai. The total annual expenditure would thus appear to be $8,100. But to this must be added loans to some of the staff in the Taotai's Yamên, which are never expected to be repaid, and have been reported to me as amounting to 7,000 taels.

These expenditures are authorized by Hu Taotai. The fixed salaries are small, but at the end of the year the accounts are submitted to Hu for inspection, and presents (included in the foregoing estimates) are awarded to all the employees, high and low, based probably on a percentage of the bank's profits.

When the foreign customs was first established here, a Ningpo man was appointed banker; but soon after Hu Taotai succeeded him. The resident managership has been held by a number of persons, including two of Hu's brothers. The present manager, Yang, is a native of Tz'ch'i-hien, near this place, and a pupil and protégé of the great banker. He is engaged in trade, in several establishments, local and otherwise, in some of which he is a partner with Hu. He is not always at Ningpo, and Ma frequently performs his duties at the bank.

The Taotai has informed me that the present Customs Bank was first authorized as such in the 5th moon of the 1st year T'ung Chih—that si, June, 1862; and that in the 11th moon, 3d year T'ung Chih—that is, December, 1864—the selection, name, etc., of this bank was duly reported through the high provincial authorities to the board of revenue and the Tsungli Yamên.

Respecting the way in which the bank's expenditure is provided for, it is impossible without several months' time to obtain exact knowledge. It is well known that the profits of the bank are considerable; indeed, it has been stated to me on good authority that they amount altogether to 50,000 taels per annum. First of all, there is interest. At Ningpo, the money collected as duties is not paid into the Taotai's treasury at regular intervals of four or five days, as is required at some ports, but the banker lends it out at interest until it is required for remitting. When Ku Ta-jên was Taotai, he once directed that the duties should be paid into his treasury every five days, but he was met with such a strenuous resistance that he soon revoked these orders. It is a principle familiar enough to the Chinese that official moneys ought not to be put out at interest in this way, but it is not adhered to here. Hu is rich, and as he sometimes accommodates the Government with advances, and shares the profits of his business with those capable of exercising influence on his behalf, he is allowed to have his own way in handling the revenues he receives. For confirmation of this see my dispatch No. 19, of January 24, 1878.

There are also other profits to the bank, such as: First, Tap'ingyü; second, Sz'p'ingyü; third, 'Huifei, and, fourth, 'Huo'hao.

The Tap'ingyü is derived from the custom of collecting Haikwan taels and remitting K'up'ing taels. In other words, the merchant pays 105.83 Ningpo taels as 100 Haikwan taels, and the bank only remits 104.70 Ningpo taels, this being 100 K'up'ing taels. Here is a profit of 1.13 Ningpo taels on every 100 Haikwan taels remitted, which would amount to 8,136 Ningpo taels if one entire year's collection had to be remitted. But for the fact here stated that K'up'ing taels only, and not Haikwan taels, are remitted I do not vouch.

The Sz'p'ingyü means the amount "squeezed" by the bank in the weight, exchange, or quality of sycee received, more than what a just weight, a correct exchange, and an honest shroffage would admit of. The 105.83 Ningpo taels demanded as the equivalent of 100 Haikwan taels is too much, as I shall show further on. Though the bank collects 105.83 Ningpo taels for 100 Haikwan taels, it paid me the other day at the rate of 105.40 Ningpo taels, as was verified by the Kung-ku.

The 'Huifei are a charge of 48 taels for every 1,000 remitted, as expenses of remitting. But as remittances are made by bills, these expenses are not incurred; still they are charged for. I am told that the bank gets one-fourth of this, the Taotai one-third, and the head Shupan one-twelfth; the rest goes to various Weiyüan, to the board of revenue, etc.

The 'Huo'hao, meltage, is a charge of 1.20 taels for every 100 taels remitted, although remittances are not made in silver. This is shared by the bank and by others at this port.

There are also small sums (from $5 to $36) annually presented to the bank by the merchants and called "stationery expenses;" ostensibly as compensation for the paper, ink, pencils, etc., used in keeping the bank's books, etc., and in issuing its documents. These are in practice the perquisites of the bank employees.

Such comments as I may have to make concerning the sources of income to the banker and his employees and others, belong under the fifth section of this report.

2. Duties at this port are paid nominally in Ningpo taels—that is, in sycee, not in dollars. [The Ningpo tael is called a Chiangp'ing tael, and will be so termed by me throughout this report.]

Every haikwan tael which has to be paid is first converted into Chiangp'ing taels at the fixed rate of 1 Haikwan tael equals 1.0583 Chiangp'ing taels, and payment of the total number of Chiangp'ing taels due is then made, sometimes (*a*) in sycee, sometimes (*b*) in dollars at the day's rate of exchange, sometimes (*c*) in bills on Shanghai expressed in Kweiyüan taels (that is, Shanghai taels) and calculated from Chiangp,ing taels at the rate of 1 Kueiyüan tael equals 0.9483 Chiangp'ing taels, and most frequently (*d*) by the Kwochang method. As the circular under reply does not ask how the rate 1.0583 was determined, I leave that point to be explained further on.

The foregoing paragraph answers categorically, as briefly as possible, the questions put under 2 in the circular. But before proceeding to the points under 3, I think it necessary to explain at some length the process of paying duties at this port.

I have said that duties are nominally paid in Chiangp'ing taels; but the actual system of paying duties here is a peculiar one. The receipt for the duty is almost invariably given to the merchant at the Customs Bank before the duty money has been received; and the duty is collected by an ally or branch of the Customs Bank either at Ningpo, a few hours after the issue of the bank receipt, as is the case with most merchants, or else at Shanghai a day or two after the issue of the bank receipt, as is the practice with a few large and favored hongs. But, stranger than this, actual dollars and actual sycee are scarcely ever paid as duties, whether into the Customs Bank here or into its Ningpo city or Shanghai coadjutor; indeed, of the 720,000 taels annually collected as our revenue, the Customs Bank proper receives in coin or silver about 3,000 taels; the Ningpo city branch of the Customs Bank

receives about 10,000 taels in coin or silver, about 215,000 taels in drafts on Shanghai, and about 392,000 taels by the Kwochang method; and the Fowk'ang (Customs) Bank in Shanghai receives about 100,000 taels in sycee, or dollars, or by Kwochang.

Before proceeding further, I must explain the banking system of Ningpo known as "Kwochang," by which the manual transfer of dollars or sycee is reduced to a minimum, thereby saving expense and risk of loss in conveying money to and fro, and waste from wear in handling, and which indeed prevents the necessity of keeping a large amount of silver in this place. If Chang owes money to Li, he tells his banker to pay Li's banker the sum required; the two bankers meet by deputy or in person, each makes a minute of the transaction in his book and seals are impressed to attest it. Money is not drawn out and conveyed from one bank to another, and not even do the parties use the medium of a bank check; private checks, too, I need not say, are not used, as they are illegal. The Kwochang system appears indeed to be a near approach to a system of barter in which the banks are merely recorders of the bartering transactions, through the medium of imaginary money, which serves simply as a standard for estimating the relative values of the articles exchanged. The Kwochang system will soon be perceived to be at the root of the extraordinary manner in which duties are paid at this port. (See Mr. Taintor's Report on the Trade of Newchwang for 1871-2, page 4. The Kwochang system, I am told, obtains also in Shanghai.)

I now propose to describe, first, how duties are paid in Ningpo, and, secondly, how payment of Ningpo duties is made at Shanghai.

The following is the process, step by step, as practiced almost universally by the merchants of Ningpo, both foreign and native. A. B., having cargo to land or ship, receives from the custom-house a duty memorandum for so many Haikwan taels. He takes this to the Customs Bank and hands in with it a pass book, which he always uses in paying duty. The banker simply notes in the pass book the sum due in Haikwan taels; a like entry is also made in the banker's record book, and the pass book is then returned to the merchant, and with it a bank receipt for so many Haikwan taels, as if they had been paid, although in fact no money has passed. The bank receipt is presented to the customs and the goods are released. Now, how does the bank collect the Haikwan taels due from A. B.?

Here a brief digression is necessary. The Customs Bank, situated very near the custom-house, is called T'ung Yü, and there exists in the business quarter, called Chiang Hsia, outside the east gate, a second bank, closely connected with the one above named, and called T'ung-ch'üan. These two banks are both Hu Taotai's. The former exists solely for revenue purposes; it does no general business, and is regarded purely as an official bank. It keeps the records, and is the only bank recognized by the Taotai. Yet it does very little of the actual duty collecting. When, as only occasionally happens, coin or sycee is to be paid as duty on the spot, T'ung Yü receives it; but, as intimated above, the total amount collected in this form in a year at Ningpo is only about 3,000 taels. T'ung-ch'üan, on the other hand, is a bank for general business purposes. It is situated near all the other banks, receives deposits, makes loans, etc. It is also the collecting agent for T'ung Yü, representing T'ung Yü vis-à-vis the other banks, getting silver for T'ung Yü when it is wanted, arranging T'ung Yü's

remittances to or from Shanghai, and probably managing the loaning of sums received as duties until such time as they have to be remitted. When, as is almost universally the case, the merchant has simply promised to pay duty by an entry in his pass book, this entry is made by T'ung Yü, and intimation of it is sent to the T'ung-ch'üan Bank. It then becomes the function of T'ung-ch'üan to collect the amount from the native bank, whichever one it may be, in which the accounts of the merchant concerned are kept.

At this point a further explanation may conveniently be made. Business in Ningpo is done in dollars. Sycee is so scarce here that when required in any considerable quantity it must be specially brought from Shanghai. But there exists a nominal Ningpo tael (as above stated) called Chiangp'ing, and it is always regarded as bearing a fixed relation to the Haikwan tael (1 Haikwan tael equals 1.0583 Chiangp'ing taels). But the relation of the dollar to the Chiangp'ing tael and that of the Shanghai tael to the Chiangp'ing tael vary constantly, and on this question of exchange disputes are liable to arise with the T'ung-ch'üan Bank in paying duties.

Now, to resume with A. B., to show how he pays the debt incurred for duty. Returning to his shop from the custom-house he sends word to the T'ung-ch'üan Bank that he has to pay so many Haikwan taels as duty, and inquiries how many dollars are claimed from him as the equivalent. He knows that the number of Chiangp'ing taels to be paid will be 1.0583 times the number of haikwan taels due; but the important question is, how many dollars will T'ung-ch'üan claim as the equivalent of the Chiangp'ing taels? Should the sum of dollars claimed be unfairly great, the merchant finds some bank which is willing to pay to T'ung-ch'üan in his behalf the amount of Chiangp'ing taels due in consideration of a less sum in dollars than T'ung-ch'üan had demanded, and T'ung-ch'üan must then accept the sum in Chiangp'ing taels.

Ordinarily, however, T'ung-ch'üan's reply would be satisfactory to the merchant, and on receiving it he directs the bank in which his accounts are kept—say the Tsz-yüan Bank, for example—to pay T'ung-ch'üan the number of dollars specified. The matter then becomes a simple one for the two banks to settle between them. Here, of course, the Kwo-chang system continues in play, unless, as rarely happens, T'ung-ch'üan chooses to demand real dollars. The general practice is for T'ung-ch'üan simply to compare accounts on the same day with Tsz-yüan, one claiming the existence of the indebtedness and the other admitting it, and that is all. It is the exception for the money to be paid at the time, but if the amount is considerable, interest is charged on it at so much per day, the rate being fixed at the outset.

The various banks, therefore, pay duties for their constituents to T'ung-ch'üan, this bank being kept advised by T'ung-yü what sums are due and from what persons. The custom is for each merchant to have an understanding with one or more of the banks that his duties are to be paid up to a certain amount, and to this extent the banks hold guaranties given by the merchant.

The medicine shops are allowed to keep a running duty account with the Customs Bank until the obligation amounts to 100 Haikwan taels, and they then pay into T'ung-ch'üan through their own banks by "Kwo-chang," the equivalent of an even 100 Haikwan taels.

The foregoing paragraphs detail the way in which about 392,000 taels of our duties are paid. It may be asked, "When does the real money pass over from the various banks into T'ung-ch'üan's hands to be remitted?" The answer is that T'ung-ch'üan sometimes requires sycee, in which case the banks procure it from Shanghai, but ordinarily they pay over by instructing their Shanghai representatives to pay to the Fow-k'ang Bank at that port. For the period after the money is due until it is called in by T'ung-ch'üan (whether in sycee, dollars, or orders on Shanghai), interest is paid by the debtor banks. This interest is the chief source of the Customs Bank's large income.

The duties paid by the two Sassoon firms on opium, amounting to about 215,000 Haikwan taels per annum, are paid here in Kweiyüan tael drafts on Shanghai. The amount of Shanghai taels due has first to be settled here. This is done by reducing the Haikwan taels to Chiangp'ing taels in the usual way (multiplying by 1.0583), and then dividing the product by 0.9483, which is a fixed rate arranged by the firms in question with the Customs Bank, and the result is the number of Shanghai taels to be paid. (This rate, 0.9483 Chiangp'ing taels equals 1 Shanghai tael, is a permanent arrangement with the old and new Sassoons; other merchants, the tea hongs, for example, convert at the rate of the day as will soon be shown). Sassoons' Ningpo banker then pays to T'ung-ch'üan an order on Shanghai for the sum required. My comments on this way of paying duties belong to a paragraph below (see No. 4). I come now to the payment of Ningpo duties at Shanghai. As is well known this port is only a point of transit for teas bound from Pingsuey or Fychow to Shanghai. It is at Shanghai, not here, that the tea men are paid for their produce, and yet the export duty is payable at Ningpo. The total amount which has to be paid on tea is from 300,000 taels at 370,000 annually, say about 45 per cent of our entire revenue of 720,000 taels. This payment falls chiefly on two or three houses only, and by the special consent of the banker these firms pay their duties, say 100,000 taels, into the Fowk'ang Bank at Shanghai, at which place, rather than here, they have available funds. The process is as follows: Kiang Yü Chang, for example, presents to the bank, say on the 20th of the month, a duty memorandum for a shipment of 600 piculs of tea. The firm's pass book is handed in, entry is made in it of an indebtedness of 1,500 Haikwan taels as duty on the part of the firm to the bank, and a duty receipt is issued, which enables the merchant to ship the tea for Shanghai on the same day. The firm writes by same opportunity to its Shanghai representative that he must pay 1,500 Haikwan taels to the Fowk'ang Bank at that place, and the Customs Bank similarly advises Fowk'ang to receive 1,500 Haikwan taels from Kiang Yü Chang. On the 21st or 22d, or about that time, Kiang Yü Chang accordingly pays Fowk'ang at Shanghai a round sum of so many Kweiyüan taels, enough or nearly enough to cover the indebtedness; the bank at Shanghai advises the Customs Bank at Ningpo that so many Shanghai taels have been paid in, and on getting this intimation the Customs Bank here makes entry in Kiang Yü Chang's pass book that so many Chiangp'ing taels have been paid in to the firm's credit, having ascertained the amount to be thus entered by converting the Shanghai taels, as advised, into Chiangp'ing taels at the rate which prevailed on the 20th, the day when the tea was shipped at Ningpo. Thus, throughout the season, the principal tea firms are allowed to pay

duty at Shanghai within a few days after it has become due, and a running account is maintained with a small balance, sometimes against the merchant and sometimes against the bank. From time to time the account is cleared to a cash. The Hip Mow Kuang tea firm have allowed me to make a copy of their pass book, and I send it herewith as a sample of them all. Duties due are, it will be seen, entered in Haikwan taels, called sz'p'ing, and payments at Shanghai are entered in Chiangp'ing taels, they having actually been made (as above stated) in Shanghai taels at Shanghai and converted at the rate current on the day the duty receipt was issued. When it becomes necessary to balance the account the Haikwan taels entered as duties are converted into Chiangp'ing taels by multiplying by 1.0583. The pass book sent with this concludes with the striking of a balance on the 24th of the 11th moon when it was found that 21,437.35 Haikwan taels, say 22,687.147 Chiangp'ing taels, had been entered as due and 20,639.10 Chiangp'ing taels had been entered to the merchant's credit. The account is finally cleared by the payment of two sums, viz, Chiangp'ing taels, 1,137.60 and 910.447.

I stated above that about 10,000 taels are paid in coin or silver to T'ung-ch'üan on the spot. This hardly needs to be explained, but I will simply say that this sum represents payments made in currency instead of by Kwo-chang by the merchants' bankers at the very time when the duties are due.

Actual sycee or dollars have to be paid as duty by everybody from the 24th day of the 12th moon to the 25th of the 1st moon.

3. The Haikwan tael bears to the ordinary local tael (Chiangp'ing-yin) the fixed proportion 1 Haikwan tael equals 1.0583 Chiangp'ing taels.

The Haikwan tael of Ningpo, that is to say 1.0583 Chiangp'ing taels bears to the Kweiyüan-p'ing tael of Shanghai an ever-varying proportion. The practice here is to convert Haikwan taels first into local taels at the fixed rate above given and then to convert the amount of Chiangp'ing taels thus ascertained into Kweiyüan taels according to the rate of the day which is determined on the arrival of the morning steamer from Shanghai. Two firms have given me tables showing the rates for 1877.

The lowest rate is 1 Kweiyüan tael equals 0.943 Chiangp'ing tael; this would give 1 Haikwan tael of Ningpo equals 1.1222693 Kweiyüan taels.

The highest rate is 1 Kweiyüan tael equals 0.949 Chiangp'ing tael; this would give 1 Haikwan tael of Ningpo equals 1.1151738 Kweiyüan taels.

The average rate calculated from the more complete of the two tables supplied me is 0.9473; this gives 1 Haikwan tael of Ningpo equals 1.117175 Kweiyüan taels.

The average rate from the other of the two tables supplied me is 0.9464; and this gives 1 Haikwan tael equals 1.118237 Kweiyüan taels.

It should be observed that I am now reporting what rates exist here without reference to whether they should or should not be what they are. Under section 5, I shall show why I think the rate 1 Haikwan tael equals 1.0583 Chiangp'ing taels is too high, and that it should be 1.0553.

The Haikwan tael as paid by the Sassoons bears to the Kweiyüan-p'ing of Shanghai, by the special arrangement described above, not a

varying but a fixed proportion, namely, 1 Haikwan tael equals 1.11599, or, say, 1.116 Kweip'ing taels. This is determined by taking 1 Haikwan tael to equal 1.0583 Chiangp'ing taels, and then converting 1.0583 Chiangp'ing taels into Kweiyüan-p'ing by dividing by the fixed rate 0.9483.

The question, What constitutes tsu-sê-wên-yin? I can not answer, nor can any of the experts whom I have interrogated on the subject.

The customs banker says that tsu means that the silver should be pure, i. e., free from other metals and foreign substances; the sê (color) of such silver should be perfectly white, and the word wên (having marks or lines) refers to that corrugated appearance which the outside of a shoe of pure sycee may be seen to have, as contrasted with the smoother surface of an impure shoe. It is well known that it takes an apprenticeship of years before a Chinaman pretends to be a competent judge of the quality of silver, and no one believes that his judgment is ever anything more than approximate. It is for this reason that a kung-ku is established at all considerable places of trade, simply because merchants must have some tribunal to pronounce authoritavely and without delay on the value of the silver used, and it is the common understanding that the kung-ku's appraisals shall be accepted, not necessarily as correct, but as authoritative. It is the crude expedient of an imperfect civilization, a sort of court of arbitration where the arbitrators are known to be incompetent, but are the best to be had. Who can be supposed to be able to determine in the case of a shoe of sycee weighing 50 taels just how many of the 5,000 candareens which it weighs are not silver, but are some other substance? And to determine this, not by a nice process of chemical analysis, but by such primitive methods as the quality of its ring when tapped, its color, especially as disclosed in the little holes which form underneath a shoe when solidifying, or as shown on a cut surface, whether it be white or yellowish, and the smooth or corrugated look of the uncut exterior of the shoe. In fact, no two experts are sure to agree as to the degree of purity or the exact percentage of its weight to be deducted as representing the admixture of foreign substance. It is well known that the tsu-sê-wên-yin of Kiangsi, where the highest standard of purity prevails, differs as much as is represented by 3 or 4 mace in every 100 taels' weight, from the silver of Fukien, where the standard of purity is the lowest, and the other provinces range between these. But the board of revenue accepts the tsu-sê-wên-yin of Fukien no less than that of Kiangsi, although the qualities differ.

4. No line of discrimination is drawn between the Chinese and foreigners in the rates.

But there are different rates: Sassoons' pay in one way, the tea hongs in another, and the rest of the merchants, whether foreign or Chinese, in another.

Sassoons' rates are all fixed. Suppose, for example, that they have to pay 25 haikwan taels; this sum is multiplied by 1.0583, giving 26.4575 as the amount due in Ch'iangp'ing taels. Then each 0.9483 Ch'iangp'ing tael is by fixed arrangement taken as 1 Kweip'ing tael, and consequently the equivalent of 26.4575 Ch'iangp'ing taels is 27.89—the amount of Shanghai taels to be paid.

The large tea hongs which pay in Shanghai reckon in the following manner: Suppose the sum of 25 Haikwan taels to be due as duty; it is set down in their pass-books as 25 Haikwan taels, and in all subse-

quent calculations made in balancing the account, this and every other sum entered in the Ningpo pass-books to the merchant's debit is converted into Ch'iangp'ing taels at 1.0583. To meet these dues, Shanghai taels are paid in at Shanghai, and these deposits are credited to the merchant in his Ningpo pass-book in Ch'iangp'ing taels, at the rate of the day on which the duty was due. For example, 25 Shanghai taels paid in by the merchant would be entered to his credit as 23.65 Ch'iangp'ing taels if the rate were 0.946, or as 23.675 Ch'iangp'ing taels if it happened to be 0.947. Thus it appears that in the deposits made by them, the tea merchants get the rate of the day, which is all they could wish, and without the intervening medium of the fixed and too high rate, 1.0583; but in the amounts entered to their debit (the duties due) they have to submit to a conversion into Ch'iangp'ing taels at the high rate, 1.0583.

All the other merchants take the rate, 1.0583, both in calculating what is due from them and what they pay in to meet these dues. Twenty-five Haikwan taels due as duty is regarded as 26.4575 Ch'iangp'ing taels, and this sum is met by two Kwochang payments, in the same number of Ch'iangp'ing taels or in dollars at the day's rate.

There is thus shown to be no discrimination separating Chinese and foreigners. All pay at 1.0583, and in this particular all alike pay too much. Further, Sassoons' have a fixed rate for converting Ch'iangp'ing taels into Kweiyüan taels, and it is too high. But the firms' accountants explain that the having a fixed rate saves dispute; they prefer to accept a somewhat high rate rather than not to have a fixed one. With an uncertain rate the bank could constantly claim too high a rate, and, if it were disputed, "shut up" the recusant ones by demanding payment in ready money, which would be a great inconvenience. It comes to this—that these two firms pay high rate as a sort of fee for the privilege allowed them by the bank of paying in an exceptional way. Besides, the rate 0.9483 is agreeable to them, as they are paid at this rate for the opium which they sell.

5. The present system works very satisfactorily in several important respects. It is in accord with the other banking practices of this place. It accepts the Kwochang system, and thus bears very lightly on the trade; it saves merchants from having to bring sycee here from Shanghai. By means of the city bank, T'ungch'üan, the risk and trouble of bringing money to the Customs Bank proper is prevented. It accommodates Sassoons' by allowing them to pay virtually in Shanghai; it also trusts the large tea hongs, so that they may pay where it is most convenient for them. And with all these facilities allowed, the bank has never been a loser.

I am not aware of any complaints having been made. At the same time I am aware that the tea hongs, being subject as they are to a constantly shifting rate, have disputes occasionally with the Customs Bank when the time comes for clearing up accounts. Hip Mow Kwang's representative told me that the firms sometimes "cut" the Customs Bank as much as 200 taels, and it may be taken for granted that this would not be submitted to were it not just. It has also reached me that the bank through whose hands our confiscation accounts pass is in the habit of charging unduly high rates to persons sentenced to pay fines. This I can easily put a stop to by levying fines in dollars, and by having confiscated goods sold in the same currency.

The first and the most directly practical suggestion that I have to

make is that the rate of 1 Haikwan tael equals 1.0583 Ch'iangp'ing taels should be reduced. The customs banker tells me that this rate has existed since the opening of the office, and that it was determined in the following manner: It was taken for granted that 111.40 Shanghai taels equal 100 Haikwan taels, and I do not go behind this arbitrary statement, though, by the way, this proportion may very likely prove on investigation to be incorrect. Accepting 111.40 Shanghai taels as 100 Haikwan taels, the question is, How many Ch'iangp'ing taels equal 111.40 Shanghai taels? This depends on how many Ch'iangp'ing taels equal 1 Shanghai tael? The banker here answers, 0.95 Ch'iangp'ing equals 1 Shanghai tael, and hence 105.83 Ch'iangp'ing equals 111.40 Shanghai taels equal 100 Haikwan taels. Now, the fact is that the average value of the Shanghai tael is less than 0.95, as claimed by the banker.

The average rate based on Davidson & Co.'s table is Ch'iangp'ing taels, 0.947327, equals 1 Shanghai tael; and by this the proper fixed rate for Ningpo would be 100 Haikwan taels equal 105.53 Ch'iangp'ing taels.

Similarly, the average rate based on the Kiang Yü Ch'ang table is Ch'iangp'ing taels 0.94643 equals 1 Shanghai tael; and by this the proper fixed rate for Ningpo would be 100 Haikwan taels equal 105.43.

Both the Davidson rate and the Kiang Yü Ch'ang rate are much below the banker's rate (105.83). The Davidson rate is based on a more comprehensive period than the other, and would be the more acceptable to the customs banker, being the higher of the two.

The Kung-ku gave me as the average value of the Kweip'ing tael 0.945 Ch'iangp'ing; this would make the Haikwan tael at Ningpo only worth Ch'iangp'ing taels 1.05273.

Again, I obtained from the customs banker two packages of sycee, each of which he certified to be worth 10 Haikwan taels. These I submitted to the Kung-ku here, and they were pronounced to be worth 10.54 Chiangp'ing taels. This test would give 105.40 as the correct rate for 100 Haikwan taels.

There is, then, evidence enough that the rate heretofore taken is too high, and in my opinion it is advisable to take the correct Shanghai rate, probably something below 111.40, and to determine from it a new rate for Ningpo, in consultation with the Taotai, and on the basis of the current rate of Shanghai taels at Ningpo for the past three years 1875, 1876, and 1877.

So far as I have been able to ascertain, the carrying out of the foregoing suggestion would remove the only thing which might be regarded as cause for complaint locally.

I do not understand from your circular that the points therein raised were to be discussed beyond their connection with the "payment of duties at the Haikwan Bank." But the foregoing paragraphs have disclosed that abuses far from trivial are practiced by the bankers, and probably by some of the officials of the Chinese Government, in connection with the revenues from the maritime customs. Some of these abuses are frauds against the Government, others frauds against the merchants. The interest on moneys received as duties should go to the Government, not to Hu Taotai; the Haikwan taels collected should all go to the Government, and not alone an equal number of taels of a smaller kind (K'up'ing); the 'Huifei should not be charged to the Government when there are no remittances made

in sycee, and the 'Huo'hao should not be charged when there is no meltage. In these points it is the Government principally that suffers, though perhaps the charges made under some of these heads are not only winked at, but are distinctly authorized. But to indicate just what ones are legal and what illegal is probably beyond the power of any foreigner; nor, I suppose, would even the high officers of the Government be certain, save some exceptions, to thank anyone who should expose publicly these privately well-known abuses.

The only abuse of those I have pointed out which directly assails the rights of the merchant, whether foreign or native, is the Sz'p'ing-yü, and the remedy for this is certainly in our hands. We should see to it that the fixed rates of exchange are not allowed to be a cash too high. Readjust these and the merchant will then have only himself to thank if he submits to minor "squeezes"—certainly so in ports like this where there are many banks and a Kung-ku.

The inquiries I have made have opened a far broader field of thought than I can possibly venture to go over, excepting by way of the barest suggestion. Can not the foreign customs be made instrumental in some degree to ameliorate the currency of the coast and of the Yangtze? In the south, where dollars are paid as duty by weight according to a fixed rate, the commissioners should be supplied with sets of standard weights from the board of revenue, and should have power to inspect and correct the weights of the customs banker. At Foochow a merchant told me that he had found the weights used by our banker to be heavier than those deposited at the British consulate. It would also be a good plan to get out from Europe a set of the most accurate money scales for each office. At the southern ports where the question of touch does not give any serious trouble, owing to the use of dollars, these scales would be an absolute check on the banks, and would prove their superiority to Chinese scales. In the north, however, it will be difficult to check the Haikwan banker until a coin of some kind is minted by the Government. I will not go further in this direction than to ask whether the Haikwan tael should not be given up in favor of the K'up'ing tael, which is the nearest of them all to being the same all over China, which our influence might go far toward making exactly the same, and which is the tael in which all other revenues are assessed.

I have, etc.,

EDWD. B. DREW,
Commissioner of Customs.

ROBERT HART, Esq.,
Inspector-General of Customs, Peking.

TAELS.

No. 143.]

CUSTOM-HOUSE,
Canton, December 20, 1878.

SIR: I have the honor to furnish the information called for by your circular No. 32, of 1877, with reference to the Customs Bank at this port.

1. After the suppression of the Cohong system by the British treaty of 1842, the Haikwan commissioned a money changer to open a bank for the receipt of customs duties. In 1844 four more partners were added, and this number has been maintained to the present time. The founder of the house has been dead some time, but his place is filled

by a son, who is superintendent of the bank. The stamp used for certifying the payment of customs duties is given in the margin.[a] The first character in each set is the family name, and the two following the shop name of the different proprietors.

The principal establishment of the bank is situated about ten minutes' walk from the custom-house, but there is a small branch office in the street adjoining the custom-house at which duties on sundry cargo may be paid, but under certain disadvantages which will be explained hereafter. The staff of the bank consists of from 40 to 60 persons, and the official provision made to meet the expenses is a grant of 8 mace per 100 taels of all duties collected. This grant, however, forms a very small part of the income of the bank, which, owing to the large sums of money passing through its hands, and the power it exercises of fixing the rates for sycee, must necessarily be very large.

Besides its duties proper as the receiver of the customs revenue, the bank engages in general business. All checks issued bear the customs allowance stamp. This distinction is probably made to enable the Haikwan Bank to keep up the fiction of only receiving duties in pure silver, and to guard against the revenue which passes through its hands becoming involved in the event of unfortunate speculations. The two branches of the bank are under the same management.

2. The Haikwan banker professes to receive duties in sycee only, and it is, of course, in this currency that his accounts are rendered to the Haikwan. But a large portion of the smaller payments especially are made in dollars, which are received by weight with the addition of a premium to make them up to sycee standard, Tsu-sê-wên-yin. This premium varies from day to day. It is regulated by the supply of dollars in the market, and is probably largely influenced by the requirements of the large provincial treasuries. A record has been kept in this office since the middle of last July, showing the daily rates for sycee—first, as fixed by the Haikwan Bank for cashing Haikwan tael checks issued in the name of (Chinese) (*e. g.*, the customs allowance); second, the rate at which sycee is purchasable (with dollars) at the money shops; and, third, the rate at which dollars are received in payment of duties by the branch of the Haikwan Bank in the street adjoining the custom-house. The fluctuations have been as follows since that time: First, Haikwan Bank's rate for payments, 7.700 taels to 8.400 taels; second, money shop's rate, 8.400 taels to 10 taels; third, Haikwan Bank, branch office rate for receipts, 9.400 taels to 11.200 taels. The rates first and third, are simply arbitrary. From the former the loss on the customs allowance exceeds on an average $300 per month; from the latter, the small shippers who pay duties at the branch office are overcharged from 1 per cent to 1½ per cent. The following sets of calculations will show more clearly the effects of the present system. The amount to be paid or received is in each instance 10,000 Haikwan taels. The premia are the rates of the day.

		Haikwan taels.
First.	(*a*) Customs allowance	10,000
	(*b*) Premium [Haikwan Bank rate for payments], 8.2 taels	820
	(*c*) Difference of scales, 0.22 taels	22
	Local taels (dollar silver)	10,842
	Dollars, at 7.1.7 taels = $15,121.34.	

[a] In Chinese characters.

NOTE.—The Haikwan scales are 0.4 taels per cent heavier than the ordinary local scales, but the banker only allows us 0.22 taels per cent. The conversion into dollars is made at 0.717 taels, whereas the average weight is about 0.7.1.0 taels.

	Haikwan taels.
Second. (*a*) Duties to be paid	10,000
(*b*) Premium [money shop rate] at 9.2 taels	920
(*c*) Difference of scale, 0.4 taels per cent	40
Local taels (dollar silver)	10,960

Dollars at 0.7.1.0 taels = $15,436.62.

NOTE.—A comparison of first and second will show that a loss of $315.28 would be sustained on the customs allowance for one month. On the 30th November, when the rates were the same as at present, Mr. Chalmers saw the private memorandum book of a shipper, which showed that he had paid duty that day at the rate of 9.6.0.0 taels premium, or 4 per cent more than the current market rate.

	Haikwan taels.
Third. Duties to be paid	10,000
Premium [branch office rate], 10.500 taels	1,050
Difference of scale, 0.4 taels per cent	40
Local taels	11,090

Dollars at 0.7.1.0 = $15,619.72.

It will be seen from the above calculations that the Haikwan Bank is not entirely dependent on the official allowance for its maintenance. It is true that the larger shippers, by arranging their payments through other banks, escape these exactions; but even when payments are made in sycee, a small percentage is charged on account of the alleged impurity of the silver.

A special charge of 0.1.6.2 taels per picul is made on all tea duties collected for the ostensible benefit of an institution. The money really goes to Howkua as the representative of the 13 Cohong merchants, and is appropriated under the sanction of the provincial authorities to liquidate a large claim they have against the provincial government for advances (2 million taels) made at the time the Elliot indemnity was paid in 1842. The charge was first levied in 1843 at the rate of 0.3.0.0 taels, but was reduced in 1857 to 0.1.6.2 taels, the present rate. The annual yield is now a little over 15,000 taels; but in former days, when Canton was the chief seat of the tea trade, and the charge nearly double the present rate, the income derived must have been very nearly 100,000 taels a year. A small portion—I have not been able to ascertain how much—is set aside for the support of the institution already mentioned.

3. As stated above, the official weights used by the Haikwan banker are 0.4 per cent heavier than the weights of the local scale.

4. Nearly all the customs duties are paid by Chinese, as it has become the custom here for foreigners to buy produce duty paid, and consequently the legality of the special charge on tea duties and the other exactions in excess of market rates have not, so far as I am aware, been called in question. It is even doubtful whether the foreign merchants here, with their ignorance of Chinese and implicit confidence in their compradors, are aware of the extra charges to which they are, at least indirectly, subjected.

5. The Haikwan Bank appears to be fairly well managed, and to perform its duties without hitch or delay. Its position here is so powerful that native merchants would hardly venture to challenge its "squeezes," even if they were heavier than they are now. The best remedy would be the issue of a Haikwan tael currency by the Imperial Government, declared to be a legal tender for customs duties. This would do away at once with all questions and disputes about weight and purity, and would be the means of introducing a reform which would in time make its influence felt in every village throughout the Empire.

I am, etc.,

WILLIAM CARTWRIGHT,
Commissioner of Customs.

ROBERT HART, Esq.,
Inspector-General of Customs, Peking.

(*b*) SYCEE: WEIGHT, VALUE, TOUCH—V. OFFICE SERIES: CUSTOMS PAPERS NO. 47.

[Translation of a memorandum on the weights and monetary system of Shanghai, drawn up by Mons. G. Pietsch, of the Comptoir d'Escompte de Paris, and dated July, 1864.]

Weights.

The tael is a weight which is in use all over China; its weight varies considerably in the different cities of the Empire.

In transactions between Chinese and foreigners the Canton tael is the one in general use, as the port from which it takes its name is the one which was first opened to foreign trade in China.

In Shanghai use is made in business of two weights: (1) The Canton tael, for goods imported, viz, for silver in bars, whether from England France, or America. (2) The Shanghai tael, for goods of Chinese origin, viz, for gold, bar and leaf; also for "sycee" silver. This question, however, will be gone into further on. According to local usage 100 Canton taels equal 102½ Shanghai taels.

I. CANTON TAEL.

According to the supplementary Franco-Chinese and Anglo-Chinese treaties signed at Shanghai in November, 1858, the Canton tael ought to weigh in French weight, 37.783 grams; in English weight, 1.333 ounces avoirdupois equals 1.215 ounces troy, or equals 24.30 pennyweights, equals 583.20 grains. These proportions are based on the convention made at Canton in 1770 between the supercargoes of the old East India Company and the privileged Chinese merchants who formerly there possessed the monopoly of the trade with foreigners. But in reality the Canton tael as in ordinary use in China is one-half per cent lighter than the above-mentioned standard, and does not weigh more than 37.58 French grams (according to the scales of the agency of the Comptoir d'Escompte de Paris); according to the basis adopted by the English banks, 1.208 ounces troy weight, 24.16 pennyweights, 579.84 grains; 3,000 taels equal 302 pounds troy, or, better, equal 3,624 ounces troy; according to the standard of India equals 3.221⅓ tolahs (the weight known in India as a tolah being 180 grains troy or 11.662 grams).

According to Article XXVI of the French treaty of June 27, 1858, and Article XXIV of the English treaty of the same month, the head

of the customs in each of the ports opened to trade ought to receive for himself and also deposit at the French and English consulates official (légales) scales both for goods and money, as well as weights and measures in exact conformity with the weights and measures in use at the Canton customs, marked with a stamp and a certificate (cachet) stating that they so conform to their standard. These standards were intended to serve as a basis for all payments of customs duties or to the Chinese Government; also that recourse might be had to them in all cases where there might be disagreement as to the weight or measure of goods.

II. SHANGHAI TAEL.

Having found that, contrary to the above-mentioned stipulation, the Chinese Government has not deposited at the consulates any standards of weights and that the weights in ordinary local use do not bear any official stamp of the Chinese Government, which does not usually interfere in such matters, I went to the Chinese custom-house of this city to compare the weights which are in use there with those employed by the agency of the Comptoir d'Escompte. After making myself acquainted with the conformity of the two weights, I made with some legal French weights a series of comparative weighings, which give the result that the Shanghai tael weighs 36.64 French grams; 565.70 grains troy (perhaps only 565.43 grains—the English, as it appears, reckon it as 566 grains in round numbers); 3.143 Indian tolahs.

The Shanghai tael is therefore a real weight, and not one merely in name, as was told me on my arrival here.

At the Shanghai custom-house I found another weight, which is called the "Haikwan" or "customs" tael. One hundred Haikwan taels weigh 102.90 Shanghai taels. This tael, it appears, is not in use commercially.

III. WEIGHTS IN USE FOR MERCHANDISE.

Besides the tael, there are other weights in use in China for goods. Subjoined is a list. The tael is the unit.

1 grain millet is a shu.
10 shu =1 lei.
10 lei =1 chu (pearl).
24 chu =1 liang (tael) =1.333 ounces avoirdupois or 37.873 grams.
16 liang=1 chin (catty)=1.333 pounds avoirdupois or 604.53 grams.
2 chin =1 yin.
30 chin =1 chün.
100 chin =1 tan (picul) =$133\frac{1}{3}$ pounds avoirdupois or 60.453 kilograms.
120 chin =1 shih (stone)=159.99 pounds avoirdupois or 72.544 kilograms.

In dealings where valuable goods are concerned the tael is subdivided into decimal fractional parts, as indicated in the table below, where the tael is dealt with as a monetary designation.

Monetary system.

I. MONEYS.

The tael is not only a weight, it is also an ideal value or monetary account term (monnaie de compte) in use in all the ports of north China.

In the English colony of Hongkong the current value is the Mexican dollar, but I am ignorant as to what is the usage in the Chinese southern ports, such as Canton, Foochow, Amoy, and Formosa.

The value of the tael varies in the different cities in the same way as its weight. Considered in either sense there are considerable differences between the taels of Peking, Tientsin, Hankow, Kiukiang, Shanghai, Chefoo, Ningpo, etc. To estimate these differences properly it would be necessary to give oneself up specially to the study of the usage of each town. This is how the case stands in Shanghai.

(*a*) *Nominal money.*—Accounts are reckoned and kept in Shanghai currency taels. This standard of value serves equally well for exchange or ordinary business (matières et marchandises).

The subdivisions of the tael and their relations are:

Tael (Liang).	Mace (Ch'ien).	Candarin (Fên).	Cash (Li).
1	10	100	1,000
	1	10	100
		1	10

(*b*) *Actual money.*—The only actual coined money is the li (small coins of copper), called by the English "cash" and by the French sapèque (from the Portuguese word sapeca).

It has been in use in China for more than 2,000 years. Its value as money is reckoned, as stated above, as the one-thousandth part of a tael; in reality, it has deteriorated, and its price is variable, according to the demand for the interior. At the moment the rate is 1,370 cash for 1 tael, which gives the value of a single cash as a little over half a French centime.

II. MONEY IN CIRCULATION.

Sycee.—For commercial transactions on a large scale a monetary unit so small as a cash would be of no use. All payments are made in silver bullion (sycee), a term employed in banking to express fine silver, in consequence of its resemblance to sai ssŭ, "fine silk."

The expression in ordinary use among the natives is not, however, sycee, but wên yin, "pure silver." The ingots are of different sizes. The ordinary weight is about 50 taels; there are some of 5 taels weight or less. Their form bears some resemblance to that of the Chinese shoe, from which "shoes" is the designation ordinarily given them by foreigners.

I shall keep to this expression, in order to distinguish these Chinese ingots from bars coming from Europe and America.

Although these shoes of sycee are the principal element in the monetary circulation in China, the Chinese Government does not take any cognizance of the making or issue of them, which matter is in the hands of those who cast them and of the bankers and money changers.

The money cast into shoes is as much made from ingots and moneys imported from foreign parts as from native sources, but it is impossible to estimate how much China can draw annually from its own mines.

At Hoshan (Yunnan), and at Tungsing, on the borders of Cochin China, there are silver mines farmed out by the Government, the renters of which employ from 40,000 to 50,000 workmen. The annual product is estimated at 2,000,000 taels. There are, besides, other mines in the interior of the Empire less rich than these if considered individually, but whose united product would be, in all probability, something considerable.

Refined silver is cast into sycee. The name of the caster and the date and place of the casting are stamped on the shoes.

For any fraud discovered afterwards, no matter at what period, the founder remains responsible and liable to severe punishment.

On leaving the hands of the founder the shoes are submitted to the inspection of a Government officer or public appraiser, called Kung-ku. After having examined them, he places on them two marks in Chinese ink, one to indicate the weight, the other to indicate the fineness. Marked with this official stamp (cachet) the shoes go into circulation as a current value.

The assays of the Chinese are exceedingly primitive and imperfect; shoes are received always and everywhere in payment without question at a conventional value based on the marks of the Kung-ku, which will be explained further on.

The fineness of the shoes of silver taken separately is not uniform, but operating on some quantities experience has shown that their average standard is ninety-eight one-hundredths or 98 touch—touch, as they say here, being equivalent to assay.

The designation of the standard of fineness is, then, as in France, 98 touch, signifying ninety-eight one hundredths or nine hundred and eighty one thousandths.

Three remittances of silver received from Shanghai by the agency in Calcutta on the 29th May and 15th and 20th December, 1862, and melted at the Calcutta mint were recognized as of an average fineness of 15½ to 16 B, i. e., nine hundred and eighty-two one thousandths.

To wit: standard of silver in India	220 —240	220—240
Better	15½	16
	235½—240	236—240
or	981.25	983.33
	$\frac{982}{1000}$ as an average.[a]	

To form a basis on which to establish the value of sycee silver the Chinese take the weight and the touch marked on the shoes by the Kung-ku, making therefore some odd enough calculations, as may be seen from some figures which follow.

Chinese memorandum, giving weight, fineness, and value of 38 shoes

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[a] This seems to mean as follows:

The standard of silver in currency in India is 220 parts of pure silver in 240 of coinage; to put this in decimal form it means that 1,000 parts contain 916.66 of pure silver.

Betterness seems to mean that 240 parts of a mixture contain (220+B) parts of pure silver.

In this instance 15½ betterness put in decimal form =15½ parts in 240 or 64.583 per 1,000.

In the same way: 16 betterness =16 parts in 240 or 66.66 per 1,000.

Therefore, $\frac{916.66}{1,000}$ fine better by $\frac{15\frac{1}{2}}{240}$ or $\frac{64.583}{1,000}=\frac{916.666+64.583}{1,000}$ = approximately $\frac{981.25}{1,000}$ as above.

Similarly, a betterness of 16 produces $\frac{983.33}{1,000}$, or an average of about $\frac{982}{1,000}$ as given above.

of sycee counted and verified at the agency of the Comptoir d'Escompte de Paris at Shanghai on the 16th March, 1864:

Shoes.	Weight in Shanghai taels.	Premium for betterness in Shanghai taels.	Shoes.	Weight in Shanghai taels.	Premium for betterness in Shanghai taels.	Shoes.	Weight in Shanghai taels.	Premium for betterness in Shanghai taels.
1	49.90	2.60	1	49.83	2.10	1	48.94	1.40
1	51.15	2.80	1	50.06	2.65	1	49.93	2.40
1	49.95	2.60	1	50.55	0.80	1	50.88	2.30
1	49.87	1.90	1	50.01	2.00	1	50.02	2.50
1	46.30	1.90	1	50.80	2.75	1	50.24	2.75
1	49.67	2.20	1	50.00	2.50	1	50.43	2.70
1	50.94	2.75	1	51.09	2.75	1	50.00	2.00
1	50.56	2.10	1	51.42	2.80	1	49.58	2.10
1	49.98	2.60	1	50.26	2.50	1	50.58	2.30
1	50.20	2.75	1	41.52	1.65	1	51.08	2.80
1	49.57	2.10	1	50.54	2.50	1	50.97	2.75
1	40.62	1.50	1	50.42	2.65			
1	50.90	2.80	1	51.42	2.80	38	1,890.12	89.70
1	49.94	2.65						

In all, 1,979.82 taels of Shanghai weight, equalling, at the rate of 100 taels currency equals 98 taels of Shanghai weight (fixed rate), 2,020.22 taels current.

Memorandum of a similar verification made in May, 1864, at the Agra Bank, Shanghai, which has had the goodness to place the information at my disposal:

(1) 69 shoes weighing..........		3,000.48 taels Shanghai weight.
(2) Premium for betterness		140.50 „ „ „
		3,140.98 „ „ „
(3) At $\frac{100}{98}$	=	3,205.01 Shanghai currency taels.

Memorandum of another verification made in June, 1864, at the agency of the Comptoir d'Escompte:

(1) 20 shoes weighing..........		980.54 taels Shanghai weight.
(2) Premium for betterness		48.60 „ „ „
		1,029.14 „ „ „
(3) At $\frac{100}{98}$	=	1,050.14 Shanghai currency taels.

Few persons are familiar with these calculations, many are entirely ignorant of them, others have adopted them mechanically without taking any notice of the basis on which they stand. Strange to say, I have never found in Shanghai anyone who has been able to give me conclusive explanations in this particular matter.

Left to my own reflections and calculations, I have arrived by induction at the following theory, which appears to me to be in perfect accord with the actual state of the case.

In each of these calculations, which are always the same, there are three striking figures which present themselves:

(1) The first indicates the weight of the shoes in Sanghai taels.

(2) The second expresses a difference between two degrees of fineness of about 4½ to 5 per cent, the real standard of the shoes being 98. It appears to me that after deducting this difference of 4.5, the remaining cipher, 93.5, would be the standard touch in the sense indicated farther on.

In practice this calculation bears a close resemblance to that in use in England, where the standard touch is the invariable basis of price for precious metals—when an ingot is of a touch above or below, it is brought by a calculation to the standard touch by adding or substracting a quantity of proportional weight.

(3) The third cipher indicates the conventional value of the shoes in currency taels of Shanghai at the fixed rate of 100 current taels for 98 taels weight of Shanghai taels.

By analysing and recasting into a European mould these calculations, at first sight so confused, I have arrived at the following results:

?Taels weight Shanghai.	1,000 currency taels.	?Taels.	1,000 currency taels.
2,020.22	1,890.60	or better 2,020.22	1,890.60
	935.60 taels (of a touch of 98)	100	98
			916.88 taels of $\frac{1000}{1000}$
?Taels weight Shanghai.	1,000 currency taels.	?Taels.	1,000 currency taels.
3,205.01	3,000.48	or better 3,205.01	3,000.48
	936.18 taels (of a touch of 98)	100	98
			917.14 taels of $\frac{1000}{1000}$
?Taels weight Shanghai.	1,000 currency tael	?Taels.	1,000 currency taels.
1,050.14	980.54	or tter 1,050.14	980.54
	933.72 taels (of a touch of 98)	100	98
			915.05 taels of $\frac{1000}{1000}$
	Mean 935.40 of $\frac{98}{100}$	or	916.66 of $\frac{100}{100}$

It will be seen that this figure varies infinitely without the variations exceeding some thousandths.

After a number of weighings and calculations, which have always come to the same result, I believe I can assert that the following proportions represent correctly the actual basis of the monetary system of Shanghai.

A quantity of silver weighing 935.40 Shanghai taels of the denomination $\frac{98}{100}$—i. e., 916.66 Shanghai taels (weight) of the denomination $\frac{1000}{1000}$—has the conventional value of 1,000 taels currency. In other words, 1 tael of silver Shanghai weight of the standard denomination $\frac{9354}{9800}$ or $\frac{916\frac{2}{3}}{1000}$ is equivalent to 1 tael of Shanghai currency within a margin of 2 or 3 thousands, more or less.

If a Shanghai currency tael, instead of being a simple "money of account," were good and proper silver money struck into real coin it would weigh 1 Shanghai tael or 36.64 grams, its standard of touch would be $\frac{916\frac{2}{3}}{1000}$, and its intrinsic value, francs $7.35\frac{18}{100}$ (calculating silver at the par value of francs 218.89 for 1 kilogram of $\frac{1000}{1000}$).

Calculation: (x) ? francs=1,000 currency taels.
1,000 currency taels=$916\frac{2}{3}$ taels weight of Shanghai fineness.
1=36.64 grams.
1,000=1 kilogram.
1=218.89.

$$10{,}000 = x \text{ (francs)} = 916\tfrac{2}{3} \times 36.64 \times 218.89$$

$$x = \frac{916\frac{2}{3} \times 36.64 \times 218.89}{10{,}000} = 735.18$$

intrinsic par value, premium on silver at Paris and freight from Paris to Shanghai not included.

But as the currency tael of Shanghai is no more than an ideal value, it cannot be better defined than by designating it as a sign representing the proportion of weight and fineness above mentioned.

Let us now examine if the result obtained at the Calcutta Mint confirms the theory set forth above. According to this theory, the result ought to be as follows:

(x) ? rupees = 100 currency taels.
1,000 = $916\frac{2}{3}$ taels weight Shanghai fineness.
1 = 3.143 tolahs fine.
$916\frac{2}{3}$ = 1,000 tolahs standard.
1 = 1 rupee.

			(x) = 314.30 rupees.
Less mintage, 2.1 per cent	6.60	}	7.23
Loss in casting, 2 per mill	0.63		
			307.07 rupees.
Commission	$\frac{1}{4}$ per cent.		
Freight	$1\frac{1}{2}$,,		
Insurance	$\frac{5}{8}$,,		
Landing and shipping	$\frac{1}{8}$,,		
Contingencies	$\frac{1}{8}$,,		
Interest (note below).			
	$2\frac{5}{8}$,,	=	8.07
Net			299.00 rupees.

See now the actual result:

1862 cost at Shanghai.

Sent first time	Tls. 48,852.13	=	Rs. 149,796. 6.11	or Rs. 306.63	per Tls. 100.
Sent second time	10,000	=	30,574.11. 9	305.75	100.
Sent third time	16.500	=	50,469. 6. 7	305.88	100.
Total	Tls. 75,352.13	=	Rs. 230,840. 9. 3	or Rs. 306.35	average.
From this deduct, as above, $2\frac{5}{8}$ per cent.		=		8.04	
				Rs. 298.31	

(Loss of interest for one month is compensated for by the interest gained on the drafts made against the sycee.)

To two-thousandths or thereabouts the reality and the theory agree. These small differences will always exist; they are unimportant and result from the fact that the purity, and even the standard, of sycee silver is not always the same.

The conclusions to be drawn from the above calculations have some interest:

(1) The standard of the currency tael of Shanghai of $\frac{916\frac{2}{3}}{1000}$ is in conformity with the rupee standard of 220–240.

(2) The cost of Shanghai sycee and its out-turn at the mint receiving houses in India stand on fixed bases.

(3) The intrinsic par value (per Shanghai 100 taels to 2 per mil or thereabouts) of Rs. 314.30 and the net par value of Rs. 299 (298 at the lowest) is the rate which represents a minimum out-turn on which an exporter of sycee can count in any case.

The result of this is that whenever the exchange for three days' sight bank bills on Calcutta or Bombay falls below 298, drafts may be sold and covered by sycee with the absolute certainty of making

money. In 1861 and 1862 the course of exchange was often enough in this position.

Whether or not my theory relative to the monetary system of this place be confirmed or modified by experience, this is certain: The verification of a box of sycee does not present any difficulty, and the operation can be performed without its being necessary to have anything to say to or to be done by the comprador. Rules to be followed:

(1) Verify your weights and assure yourself that your Shanghai tael has the required weight of 36.64 grams.

(2) Then weigh your shoes; ascertain the total weight and calculate the value, reckoning 100 taels current for 93.54 Shanghai taels (weight).

In this way you will be sure of finding out to a few thousands the current value of your sycee.

When a great number of shoes pass through one's hands such an operation can not take place every day, but in any well-ordered financial establishment it ought to be made at least once or twice a month, it being of course understood that a daily approximate verification should be made.

The entire mechanism of China for keeping money in motion is extremely crude and inconvenient. Silver is ordinarily packed in boxes, each containing about 60 shoes, weighing altogether a little over 3,000 taels or 110 kilograms. To carry one such case two coolies must be paid, by the trip, at the rate of 50 cash (25 centimes French money) a head.

To pay 100,000 taels (800,000 francs) 66 coolies are consequently required.

From a bank to a private person this expenditure is charged to the latter; from one bank to another, to the one buying.

One can readily imagine the inconveniences of such a system. The simplest means of obviating it would be the establishment of a clearing house, which would, so to speak, represent generally the coffers of all the bankers and merchants, through the medium of which they would effect all their receipts and payments; but the place is not yet ripe for institutions of this sort.

Some of the English banks issue bank notes payable to bearer, but I do not know to what extent or if the notes issued remain long in circulation.

SHANGHAI, *July, 1864.*

Weighing trial, August, 1880.

SHANGHAI TAEL.

Weight in grains.		Weight in grams (0.0648=1 grain).	
(1) According to Mr. Veitch, of the Hongkong and Shanghai Banking Corporation	565.973	(1) No information obtainable.	
(2) By weighing trials at this office obtained	564.229	(2) By calculation of Mr. Veitch's statement, 565.973 grains × 0.0648 gram	36.6750504
(3) Average	565.101	(3) By calculation of what I found the Shanghai tael, 564.229 grains × 0.0648 gram	36.562
		(4) By weighing trials at this office obtained	36.555
		(5) Average	36.59735

Weighing trial, August, 1880—Continued.

HAIKWAN TAEL.

Weight in grains.		Weight in grams (0.0648=1 grain).	
(1) According to the Hongkong and Shanghai Banking Corporation, 102.90 Shanghai taels=100 haikwan taels, and 1 Shanghai tael=565.973 grains; thus, 1 Haikwan tael......	582.3862	(1) No information obtainable.	
(2) According to Mr. Veitch, of the Hongkong and Shanghai Banking Corporation	581.630	(2) By calculation of Mr. Veitch's statement, 581.630 grains × 0.0648 gram..	37.689624
(3) By weighing trials at this office obtained	581.938	(3) By calculation of what I found the Haikwan tael, 581.938 grains × 0.0648 gram	37.7096
(4) Average	581.984	(4) By weighing trials at this office obtained	37.686
		(5) Average	37.69501

K'U-P'ING TAEL.

(1) According to the Hongkong and Shanghai Banking Corporation, 101.80 Shanghai taels=100 K'u-p'ing taels, and 1 Shanghai tael=565.973 grains; thus, 1 K'u-p'ing tael	576.160514	(1) No information obtainable.	
(2) The Hongkong and Shanghai Banking Corporation can not give any information respecting the K'u-p'ing tael.		(2) By calculation of weight given by Hongkong and Shanghai Banking Corporation, 576.1605 grains × 0.0648 gram	37.3352
(3) By weighing trials at this office obtained	576.339	(3) By calculation of what I found the K'u-p'ing tael, 576.339 grains × 0.0648 gram	37.336
(4) Average	576.2497	(4) By weighing trials at this office obtained with two different weights—	
		1 tael weight	37.320
		6 mace and 4 mace (=1 tael)	37.258
		(5) Average	37.3173

TOUCH OR FINENESS.

There is no positive standard of touch or fineness for the different taels.

G. H. NOETZLI.

STATISTICAL DEPARTMENT,
Shanghai, August 28, 1880.

New weighing trial, September, 1880.

SHANGHAI TAEL.

Weight in grains.		Weight in grams (0.0648=1 grain).	
(1) 1 tael weighed	564.954	(1) 1 tael weighed	36.590
2 taels weighed	1,130.201	2 taels weighed	73.117
1 tael=	565.100	1 tael=	36.558
3 taels weighed	1,695.448	3 taels weighed	109.777
1 tael=	565.149	1 tael=	36.592
5 mace weighed	282.614	5 mace weighed	18.275
1 tael=	565.228	1 tael=	36.550
Average	565.117	Average	36.587
		No information obtainable as to the weight in grams.	
(2) According to the information of Mr. Veitch, of the Hongkong and Shanghai Banking Corporation..	565.973	(2) By calculation of Mr. Veitch's statement, 565.973 grains × 0.0648 gram.	36.675
(3) By my first weighing trial, 28th August, 1880 (weights procured from Hongkong and Shanghai Banking Corporation)	564.229	(3) By my first weighing trial, 28th August, 1880	36.555
		(4) By calculation, 565.117 grains × 0.0648 gram	36.6195

The fundamental difficulty is that the weights do not agree among themselves, so that it is impossible to know which is the correct weight.

On the whole, I would not hesitate to take 565.10 grains and 36.56 grams as the weight of a Shanghai tael.

HAIKWAN TAEL.

Weight in grains.		Weight in grams (0.0648=1 grain).	
(1) 1 tael weighed	582.031	(1) 1 tael weighed	37.677
2 taels weighed	1,163.861	2 taels weighed	75.350
1 tael=	581.930	1 tael=	37.675
3 taels weighed	1,743.741	3 taels weighed	112.894
1 tael=	581.247	1 tael=	37.631
9 mace and 1 mace (=1 tael) weighed	584.309	9 mace and 1 mace (=1 tael) weighed	37.845
7 mace and 3 mace (=1 tael) weighed	582.864	7 mace and 3 mace (=1 tael) weighed	37.740
6 mace and 4 mace (=1 tael) weighed	580.938	6 mace and 4 mace (=1 tael) weighed	37.602
5 mace, 4 mace, and 1 mace (=1 tael) weighed	584.463	5 mace, 4 mace, and 1 mace (=1 tael) weighed	37.847
Average	582.2207	Average	37.6955
		No information obtainable as to the weight in grams.	
(2) According to the Hongkong and Shanghai Banking Corporation, 102.90 Shanghai taels=100 Haikwan taels, and 1 Shanghai tael =565.973 grains; thus, 1 Haikwan tael	582.3862	(2) By calculation, 582.3862 grains ×0.0648 gram	37.7386
(3) Mr. Veitch, of the Hongkong and Shanghai Banking Corporation, gives	581.630	(3) By calculation, 581.630 grains×0.0648 gram	37.6896
(4) By my first weighing trial, 28th August, 1880	581.938	(4) By my first weighing trial, 28th August, 1880	37.686
(5) If 102.90 Shanghai taels=100 Haikwan taels, and 1 Shanghai tael, as found by the new weighing trial, =565.117 grains, then 1 Haikwan tael is	581.5053	(5) By calculation, 581.5053 grains ×0.0648 gram	37.6815

The weights (a new set) for the new weighing trial were obtained from the Haikwan Bank, after some delay for the purpose of having them assayed. The above figures, however, show how imperfectly the task was performed. I am under the impression that the bank forgot to have the weights assayed, and when I called for them was ashamed to say so. I would be inclined to take 581.938 grains and 37.686 grams as the most approximate. This weight is thirty one-hundredths grain above Mr. Veitch's statement, thirty one-hundredths grain below the found average, and equal to the 2 taels weight.

K'U-P'ING TAEL.

Weight in grains.		Weight in grams (0.0648=1 grain).	
(1) 1 tael weighed	575.463	(1) 1 tael weighed	37.254
2 taels weighed	1,151.846	2 taels weighed	74.550
1 tael=	575.923	1 tael=	37.275
3 taels weighed	1,726.962	3 taels weighed	111.970
1 tael=	575.654	1 tael=	37.323
8 mace and 2 mace (=1 tael) weighed	575.494	8 mace and 2 mace (=1 tael) weighed	37.257
7 mace and 3 mace (=1 tael) weighed	576.571	7 mace and 3 mace (=1 tael) weighed	27.330
5 mace, 3 mace, and 2 mace (=1 tael) weighed	576.309	5 mace, 3 mace, and 2 mace (=1 tael) weighed	37.314
Average	575.849	Average	37.297
		No information obtainable as to the weight in grams.	
(2) According to the Hongkong and Shanghai Banking Corporation, 101.80 Shanghai taels=100 K'u-p'ing taels, and 1 Shanghai tael=565.973 grains; thus, 1 K'u-p'ing tael	576.1605	(2) By calculation, 576.1605 grains × 0.0648 gram	37.3352
(2a) At 565.117 grains for the Shanghai tael, 1 K'u-p'ing tael would be	575.289	(2a) By calculation, 575.289 grains × 0.0648 gram	37.2787
(3) By my first weighing trial, 28th August, 1880	576.339	(3) By calculation of my first weighing trial, 576.339 grains × 0.0648 gram	37.346
(4) Dr. S. Wells Williams, in his Chinese Commercial Guide, page 275, gives	579	(4) By my first weighing trial, 28th August, 1880	37.320 37.258

The weights used in the above trial were procured from the Haikwan Bank, after waiting for some time to have them assayed; but here also they were found to differ among themselves. I would be inclined to take the result of the weighings of the 2 taels and 3 taels—575.923 and 575.654 grains, giving an average of 575.788 grains, 37.275 and 37.323 grams, giving an average of 37.299 grams—as the weight most likely to be correct.

TOUCH OR FINENESS.

There is no standard as to touch or fineness for the different taels.

G. H. NOETZLI.

STATISTICAL DEPARTMENT,
Shanghai, 30th September, 1880.

Memorandum.

1. *The Shanghai market (or Kuei-p'ing) tael* (not a weight).—Fineness —2 or 2 per cent discount.

The Shanghai or Kuei-p'ing tael used in the record of values has no corresponding weight. There are copper or brass weights for Haikwan or Ssŭ-p'ing taels, for K'u-p'ing taels, and for Ts'ao-p'ing taels; but I am told that there are no copper or brass weights called Kuei-p'ing weights. Shanghai sycee is known as tou-kuei yin, also as chiu-pa yin.

2. The Kuei-p'ing tael is not a weight, but is the result of a calculation, the elements in which are the actual weight of the silver in Ts'ao-p'ing taels. The addition to this of whatever percentage is indorsed by the Kung-ku on each shoe for its quality or betterness. The conversion of the total of the two sums into the so-called Kuei-p'ing taels at the rate Ts'ao-p'ing taels 98 = Kuei-p'ing taels 100.

For example, a shoe of sycee that has to be valued is taken to the Kung-ku office; there the weight, say, 50 Ts'ao-p'ing taels, is written on the shoe; also the premium for quality, say, Ts'ao-p'ing taels 2.70. The owner can then say that he has 50 Ts'ao-p'ing taels of sycee of 2.70 premium. Should he wish, however, to express the value of his sycee in the so-called Kuei-p'ing tael, the total of the two figures must be divided by 0.98 ($\frac{98}{100}$) or multiplied by $\frac{100}{98}$, e. g., 1 shoe 50 Ts'ao-p'ing taels weight + premium Ts'ao-p'ing taels 2.70 = Ts'ao-p'ing taels 52.70 ÷ 0.98 = Kuei-p'ing taels 53.77.

	Ts'ao-p'ing taels.
Weight........................	50.00
Premium......................	2.70

```
.98) 52.70 (53.77
     490
     ---
      370
      294
      ---
       760
       686
       ---
       740
       686
```

The following is a copy of the tally of box No. 1 of the remittance of sycee from Chefoo ex Fungshun on 26th July last, the valuation being made at the Haikwan Bank on the 27th July by deputies from the Kung-ku office:

Shoes.	Actual weight.	Premium for quality of sycee per shoe.	Shoes.	Actual weight.	Premium for quality of sycee per shoe.
	Ts'ao-p'ing taels.	*Ts'ao-p'ing taels.*		*Ts'ao-p'ing taels.*	*Ts'ao-p'ing taels.*
1.....	51.37	2.80	22....	50.10	2.70
2.....	50.97	" 3 at 2.80=Tls. 8.40	23....	50.97	"
3.....	50.82	"	24....	50.60	"
4.....	50.03	2.75	25....	50.60	"
5.....	50.02	"	26....	50.13	"
6.....	50.92	"	27....	51.15	"
7.....	50.72	"	28....	50.80	"
8.....	50.72	"	29....	50.19	"
9.....	50.84	"	30....	50.24	" 17 at 2.70=Tls. 45.90
10.....	50.50	"	31....	50.20	"
11.....	49.95	"	32....	50.84	"
12.....	50.21	" 18 at 2.75=Tls. 49.50	33....	49.94	"
13.....	50.36	"	34....	50.28	"
14.....	49.90	"	35....	49.87	"
15.....	50.94	"	36....	51.25	"
16.....	49.87	"	37....	50.18	"
17.....	50.81	"	38....	50.95	"
18.....	51.30	"	39....	50.14	2.65 2 at 2.65=Tls. 5.30
19.....	50.02	"	40....	50.30	"
20.....	50.36	"			
21.....	50.02	"			

Total premium 109.10 taels.

2,019.38 total weight.
109.10 premium in Ts'ao-p'ing taels.

.98) 2,128.48 (2,171.918
196
168
98
704
686
188
98
900
882
180
98
820
784
36

The object of the two foregoing operations is, first, to reduce sycee of a given premium to its equivalent in terms of a sycee without premium, and, second, to reduce that figure to its equivalent in terms of a sycee that is either 2 per cent inferior to sycee that bears no premium or that is subject to a discount in weighing.

I have been told that 98 Ts'ao-p'ing taels are taken to equal 100 taels kuei yin as a mere discount on weight. I have also been told that the relation of 98 to 100 is set down to the inferiority of the original kuei yin sycee as compared with the present standard of the Kung-ku office. In Edkins's Progressive Lessons in Chinese, page 29, the following definition is given: "Kiu-pah yin, Shanghai sycee, literally, sycee at 2 per cent discount."

On inquiry at the Kung-ku office[a] I obtained a memorandum in

[a] I have not been able to find any confirmation of the statement that Shanghai sycee is sycee of the dollar purity; my authority from the Kung-ku office says that it differs somewhat in fineness from the dollar.

answer to certain questions to the effect that the weight adopted by the Kung-ku is the Ts'ao-p'ing weight used, before the opening of Shanghai to foreign trade, by the merchants in the pulse and grain trade; that the sycee used by the trade was called yüan-ssŭ yin, and was cast in small round cakes of about a tael's weight each, which were current much as dollars now are; that it was also called tou-kuei yin, because it was the regulation sycee of the pulse and grain trade; and that compared with the present standard of the Kung-ku, kuei yin sycee would have its quality expressed by the term chü hsui erh shi—that is, each 100 taels weight of such sycee would have a discount of 2 taels and be taken only as 98 taels.

On the Kung-ku scale of touches, then, this yüan-ssŭ yin would have its standard expressed by minus two (−2), e. g.:

Haikwan. K'u-p'ing. Ts'ao-p'ing. Kuei yin

$$\text{Percentages..}\underbrace{(+6.168),\ +6\ (+5.6)\ +5,\ +4,\ +3,\ +2,\ +1,}_{\text{Degrees of betterness.}}\ 0,\ \underbrace{-1,\ -2,\ -3,\ -4}_{\text{Degrees of worseness.}}$$

The scale proceeds by 5 candarins per 50 taels or 1 mace per 100 taels, but for sake of brevity the whole numbers only are given in the illustration.

The yüan-ssŭ or kuei yin is no longer met with, the current sycee varying from 4 to 6 degrees of betterness, but the denomination of value is kept up, and all values are expressed in their equivalents in the imaginary kuei yin.

The term Kuei-p'ing seems somewhat misleading (there being no weight of that name), so, instead of writing 100 taels Kuei-p'ing, we might preferably write 100 taels of kuei yin.

The following calculation is submitted for finding the rate of exchange between, say, Ts'ao-p'ing sycee and kuei yin:

SCALE.

Percentages.

Degrees of betterness.	*a.*	(106.168)	Haikwan.
	b.	106.	
	c.	(105.6)	K'u-p'ing.
	d.	105	Ts'ao-p'ing.
	e.	104	
	f.	103	
	g.	102	
	h.	101	
	x.	100	
Degrees of worseness.	*i.*	99	
	j.	98	Kuei yin.
	k.	97	

To find the relation which sycee of the *d* quality bears to the sycee of the *j* quality:

$$(j=\frac{98}{100}x) \text{ or}$$
$$100j=98x$$
$$105x=100d$$
$$d=\text{Ans. } 1.071428j$$
$$\frac{100j\times105x\times d}{98x\times100d}=\frac{105j}{98}$$

Or by analysis:

$$100d=105x$$
$$98x=100j$$
$$x=\frac{100j}{98}$$
$$100d=\frac{105\times100j}{98}$$
$$d=\frac{105j}{98}$$

One of the premises of the calculation is that $j=\frac{98}{100}x$; this is merely a comparison of percentages. It follows that 100 taels of the j quality equal 98 taels of the x quality, and that $x=\frac{100}{99}j$; and 1 tael of the x quality equals $\frac{100}{98}$ taels of the j quality:

$$j=\frac{98}{100}x$$
$$100j=98x$$
$$\frac{100j}{98}=x$$

In the foregoing calculations sycee of different grades has had its value expressed in terms of sycee of the x quality by adding the percentage of premium to the weight; by the above formula x equals $\frac{100}{98}j$, so whatever coefficient there may be of x, whether it be 52.70, as in the first example, or 2,128.48, as in the second example, may be multiplied by $\frac{100}{98}j$ in lieu of x, the answer being the equivalent in kuei yin sycee. In the calculations, in place of multiplying by 100 and dividing by 98 a step is saved by dividing by the decimal 0.98.

The Chinese method of making the calculation on the suan-pan to find the equivalent in kuei yin of 100 Ts'ao-p'ing taels weight of sycee at 5 per cent premium is—

	Ts'ao-p'ing taels.
To	100. 00
Add for premium	5. 00
For 100 taels add 2 per cent	2. 00 called shên shang shên chia êrh.
For 7 taels add 2 per cent	0. 14
For 0.14 taels add 2 per cent	0. 0028
For 0.0028 taels add 2 per cent	0. 000056
	Ts'ao-p'ing taels 107. 142856 +

The process may be carried on until the repeating decimal $0.\dot{1}4285\dot{7}$ is obtained in the answer. The direct division of 105 by 98 gives the same answer: $107.\dot{1}4285\dot{7}$, $\dot{1}4285\dot{7}$, etc.

3. *Fineness.*—I was told at the Oriental Bank that through remittances to India the average fineness of Shanghai sycee, as assayed by the mints in India, was found to be 982, and at the Comptoir d'Escompte that it was 980 or 982. The comprador of the Oriental Bank Corporation stated that the Chinese term 2.70 premium (per 50 taels) corresponded to 986,[a] but it is hardly worth while to make a calculation on the basis of a single statement. Were, however, a certified statement obtainable of the out-turn as to fineness of a shipment of sycee in which each shoe had been marked by the Kung-ku as of a given pre-

[a] My authority from the Kung-ku office considers that—

2.70 corresponds to	988	2.95 corresponds to	993	3.15 corresponds to	997
2.75	989	3.00	994	3.20	998
2.80	990	3.05	995	3.25	999
2.85	991	3.10	996	3.30	1000
2.90	992				

taking as his basis that foreign bar silver is stamped as 998; but never having had occasion to make the calculation, gives these figures as approximate only.

mium—say, 2.70—then a basis would be obtained from which the foreign expressions corresponding to the terms for betterness of sycee, such as 2.6, 2.65, 2.7, 2.75, etc., could be calculated and given in thousandths ($\frac{1000}{1000}$).

The out-turn of several remittances to India can be referred to, but the records do not state that the sycee experimented on was of a uniform touch. In the foregoing tally of 40 shoes it is seen that the shoes of sycee in one box were of four different grades of fineness. A "lot" of sycee may contain shoes from different provinces and varying in betterness from 2 taels or less up to 3 taels premium (per 50 taels weight, or double these figures per 100 taels weight).

I am further told that the smelting establishments which convert bar silver or dollars into sycee, and which recast certain sycee for the percentage of gold contained in it, have no fixed standard of fineness; the shoes turned out will enter into the currency of the place whether they be of 2.6, 2.65, 2.7, or 2.75 touch.

It appears, then, that in the absence of further information as to the Chinese standard of the sycee sent to India no conclusion can be come to as to the proper foreign equivalents for the terms in the Chinese scale of touches.

The required touch or premium for K'u-p'ing taels is taken as 2.8 per 50 taels, or 5.6 taels per 100 taels weight; it would appear, then, that the fineness of K'u-p'ing sycee could be ascertained approximately by having a number of shoes, certified to by the Kung-ku as being of this exact quality, submitted to a foreign mint for assay. From the result the entire Chinese scale of touches could be calculated, or the same experiment might be made with sycee picked at the Ts'ao-p'ing or at the Haikwan standard; in any case a basis would be obtained for calculating the requirements for a coin equivalent to the Haikwan, K'u-p'ing, Ts'ao-p'ing, or Shanghai tael. It would, however, still be a question whether the Kung-ku offices at different places have a common standard of valuation,[a] and whether a valuation made by an unofficial Kung-ku office would be accepted at a provincial treasury.

4. *Haikwan taels.*—

Weight each	581.47 grains.
Fineness	6 Haikwan taels premium per 100.

Distinction has to be made between a tael's weight and a tael's value.

As to weight: I procured from the Haikwan Bank manager a set of weights called kuan or Ssŭ-p'ing fa-ma, made of brass, with the exception of the weights for candarins, which are of ivory in small strips. The 50-tael weight has cast on it the characters (Chinese).

These weights I have compared with a set of troy weights belonging to the Comptoir d'Escompte, obtaining results varying from 581.71 grains to 581.60 grains per tael; but as in weighing the subdivisions or lesser Haikwan weights had to be used, which were found not to agree closely with the 50-tael weight, it may be better to arrive at the

[a] I have been informed since writing the above that sycee, considered at Shanghai to bear a premium of 3.2 taels per 100, at Chefoo would only be considered as of the unity standard—that is, as having no premium and no discount.

Shanghai premium, 3.2 taels said to equal unity standard at Chefoo.
Shanghai premium, 4.8 taels said to equal unity standard at Hankow.
Shanghai premium, 2.7 taels said to equal unity standard at Soochow.

weight of the Haikwan tael by multiplying the weight obtained for the Ts'ao-p'ing tael, viz, 565.637 grains, by the accepted proportion, 100 Haikwan taels weigh 102.80 Ts'ao-p'ing taels.

565.637 × 102.80 = 581.47 grains, weight of 1 Haikwan tael.
1 Haikwan tael weighs (or should weigh) 581.47 grains.

At the Kung-ku office the Haikwan 50-tael weight was considered to be the most reliable of the set. Furthermore, its ascertained weight in Ts'ao-p'ing taels agrees with the figure used by the Haikwan Bank in its calculation on page 23.

By using a set of gram weights belonging to the Comptoir I found 1 Haikwan tael to weigh 37.68 grams, and on another trial to weigh 37.66 grams. The first result is verified as follows: Multiply the weight taken for the Ts'ao-p'ing tael, 36.6527 grams, by the proportion 100 Haikwan taels weigh 101.80 Ts'ao-p'ing taels.

36.6527 × 102.80 = 37.6789 grams, weight of 1 Haikwan tael.
1 Haikwan tael weighs (or should weigh) 37.68 grams.

If the figures 37.6789 be multiplied by 15.432349 (the number of grains equivalent to a gram) the result is 581.47 grains—the weight submitted above for the Haikwan tael.

In the Reports on the Haikwan Banking System, page 100, it is stated that tael weights from the [Wuhu] Haikwan Bank were weighed by Mr. Taintor, the Haikwan tael being found to weigh 582.94 grains troy, and the Wuhu tael, 565.7035 grains. On page 97, Mr. Kopsch gives the weight of 1 Haikwan tael as 38.08 grams nearly; multiplying this figure by 15.432349, the equivalent 587.66 grains is obtained. According to Mr. Taintor, 1 Haikwan tael weighed 582.94 grains; according to Mr. Kopsch, 1 Haikwan tael weighed 587.66 grains. As given above, 1 Haikwan tael weighs 581.47 grains. The 50-tael weight mentioned above was found at the Kung-ku office to weigh 51.40 Ts'ao-p'ing taels and indorsed to that effect; hence, 100 Haikwan taels weigh 102.80 Ts'ao-p'ing taels.

The Haikwan tael as a denomination of value: In practice in Shanghai the Haikwan tael is not a denomination of weight, but of value; it may theoretically be a tael's weight of sycee of 6 taels touch or premium per 100; but as such sycee is not generally current at Shanghai the equivalent in Shanghai taels is accepted in the collection of duties, the calculation being—

As the Haikwan tael weight of brass bears to the Ts'ao-p'ing tael weight the proportion 100:102.80:	Shanghai Ts'ao-p'ing taels.
To	100.000
Add for difference in weight	2.800
Add for touch or premium, 6 × 102.8 Haikwan taels	6.168
Meltage fee, etc	.204
Ts'ao-p'ing taels	109.172

(That is, 109.172 Ts'ao-p'ing taels (without premium), less meltage fee, equals 100 Haikwan taels of the standard 6 taels premium.)

Ninety-eight Ts'ao-p'ing taels being taken to equal 100 Shanghai taels, we have the proportion—

Ts'ao-p'ing Tls. 98 : Shanghai Tls. 100 :: Ts'ao-p'ing Tls. 109.172 : 111.4

```
98) 109.172 (111.4
    98
    ---
    111
     98
    ---
     137
      98
     ---
      392
      392
      ---
```

Haikwan taels, 100=Shanghai taels, 111.4.

To pay 100 Haikwan taels one must hand the bank sycee or dollars or cash at the market rate, or the tael notes issued by the foreign banks, to the value of 111.4 Shanghai taels. The calculation, however, includes a meltage fee, and the item of premium, 6 taels, is in excess of what is generally required, 2.8 taels per weight of 50 taels, or 5.6 taels per weight of 100 taels, being said to be the standard for K'u-p'ing, or provincial treasurer's, sycee.[a] Why the meltage fee should be charged when the bank is not forced to take a given weight of dollars is not apparent. Were the meltage, etc., fee dropped out and the standard for K'u-p'ing sycee taken, the calculation would be—

$$100+2.80+5.60=108.40\div.98=110.61 \text{ Shanghai taels.}$$

The calculation given above is that communicated by the Haikwan Bank manager and printed in the Shanghai Report on the Haikwan Banking System, page 111.

5. *K'u-p'ing taels*—

Weight, each	575.82 grains.
Fineness	5.60 taels per 100.

Distinction has to be made between a tael's weight and a tael's value.

As to weight: I procured from the Haikwan Bank a set of brass weights with the characters K'u-p'ing cut on them, which were compared for me at the Kung-ku office with the sets of troy and gram weights from the Comptoir as well as with the Kung-ku Ts'ao-p'ing weights. It was found that the 50-tael K'u-p'ing weight weighed 50.90 Ts'ao-p'ing taels, and it was indorsed accordingly; hence—

100 K'u-p'ing taels weigh 101.80 Ts'ao-p'ing taels;

also that 1 K'u-p'ing tael weighed 575.812 grains.

For the sake of uniformity we may multiply the weight obtained for the Ts'ao-p'ing tael, viz, 565.637 grains, by 101.80, the proportion given above, and take the result, 575.818 grains, as the weight of the K'u-p'ing tael.

1 K'u-p'ing tael weighs (or should weigh) 575.82 grains.

In grams the K'u-p'ing tael was found to weigh 37.30. If, however, the weight of the Ts'ao-p'ing tael in grams, 36.6527, be multiplied by 101.80, the fixed proportion, the result obtained is 37.312 grams; the

[a] 2.8 or 5.6 is the touch used in calculating the official rate of exchange between K'u-p'ing and Shanghai taels; 2.8 is, however, considerably below the pure silver which the Chinese may lay claim to collect.

same figure is obtained by dividing 575.818 by 15.432349, to reduce grains to grams.

1 K'u-p'ing tael weighs (or should weigh) 37.312 grams.

As regards value and fineness: The standard for K'u-p'ing sycee is said to be 2.80 taels premium per shoe of 50 taels weight, or 5.60 taels per 100 taels weight.

The rate for converting K'u-p'ing into Shanghai taels is 100 K'u-p'ing taels = 109.6 Shanghai (kuei yin) taels, and is arrived at as shown in the following calculation:

As the K'u-p'ing tael weight of brass bears to the Ts'ao-p'ing tael weight the proportion 100 : 101.80, so—

	Shanghai Ts'ao-p'ing taels.
To	100.00
Add for difference in weight	1.80
Add for touch or premium	5.60
Ts'ao-p'ing taels	107.40

(That is, 107.40 Ts'ao-p'ing taels (without premium) equal 100 K'u-p'ing taels of the standard 5.60 taels premium.)

Ninety-eight Ts'ao-p'ing taels being taken to equal 100 Shanghai taels, we have the proportion—

Ts'ao-p'ing Tls. 98 : Shanghai Tls. 100 :: Ts'ao-p'ing Tls. 107.40 : 109.6.

```
98) 107.40 (109.592
    98
    ---
     940
     882
     ---
      580
      490
      ---
       900
       882
       ---
       180
```

100 K'u-p'ing taels=kuei yin or 109.60 Shanghai taels.

The above calculation differs from that for the conversion of Haikwan into Shanghai taels in that the premium is considered as expressed in Ts'ao-p'ing taels, and that no meltage fee enters into the calculation.

I have been told in the Haikwan Bank that a remittance would not necessarily be of sycee picked for the 2.80 touch. To remit 2,000 K'u-p'ing taels, the sycee would be put up in packets of 100 K'u-p'ing taels weight each, the cover of the packet would be marked with the touch of the sycee, say 2.75 taels per 50 taels, or 5.50 taels per packet; the difference between 5.50 taels and the standard 5.60 taels, viz, 1 mace for each packet, would have to be made good, and to make up the 2,000 K'u-p'ing taels an additional 2 K'u-p'ing taels weight of broken sycee would have to be put in the box.

On the 21st or 22d ultimo I took advantage of the Kung-ku appraisers being at the Haikwan Bank to have compared a bank weight, marked with Chinese characters expressing the fact that it is the standard treasury weight of that locality, with the weights brought from the Kung-ku office, with the result that it weighed 101.80 Ts'ao-p'ing taels.

6. *Ts'ao-p'ing taels—*

Weight each ....565.637 grains.
Fineness .... { 5.50 taels per 100 Kung-ku standard.
5.00 taels per 100 official.

As to weight: The Ts'ao-p'ing tael weight[a] of brass is the basis of all monetary calculations when the value of sycee is in question, it being used for weighing the sycee.

I have compared the troy weights of the Comptoir with the Ts'ao-p'ing weights at the Comptoir, the Haikwan Bank, and the Kung-ku office, with results varying from 565.72 grains to 565.56 grains as the weight of 1 Ts'ao-p'ing tael; but as the weights of the Kung-ku office are accepted as the local standard, and their balances considered to be accurate, I prefer taking the weight ascertained there to an average of several weighings at different places. By the Kung-ku weights a brass weight of 100 ounces troy weighed 84.86 Ts'ao-p'ing taels.

100 ounces=48,000 grains÷84.86=565.6375.
1 Ts'ao-p'ing tael weighs 565.6375 grains.

In this experiment the balance between the 100-ounce weight and the 84.86 taels was considered exact. The Chinese in weighing do not use any fractional part of a candarin, but were a half candarin (5 li) added to or subtracted from 84.86 taels the difference in the result would only be 0.033 of a grain.

At the Kung-ku office I found 950 grams to balance 25.93 Ts'ao-p'ing taels; the result worked out is 1 Ts'ao-p'ing tael weighs 36.64 grams. But as in this case the weight in taels is small and the possible discrepancy of a half candarin in weighing would have a greater effect on the answer than in the foregoing calculation, I prefer to take the Ts'ao-p'ing tael as equal to 565.6375 grains, and to ascertain the equivalent in grams by dividing that figure by 15.432349, the number of grains equal to 1 gram.

565.6375÷15.432349=36.6527.
1 Ts'ao-p'ing tael weighs (or should weigh) 36.6527 grams.

Also by the Kung-ku weights—

102.80 Ts'ao-p'ing taels weight=100 Haikwan taels weight.
101.80 Ts'ao-p'ing taels weight=100 K'u-p'ing taels weight.

In 1864 the manager of the Comptoir d'Escompte at Shanghai gave the weight of the Shanghai tael as "troy grains 565.70, perhaps only 565.43;" the present manager of that bank gives the weight as 565.63 grains.

As regards value and fineness: The standard for Ts'ao-p'ing sycee is said to be 2.75 per 50 taels weight, or 5.50 taels premium per 100 taels weight; that is, for tsu-sê Ts'ao-p'ing sycee. In written bank orders, to prevent dispute, the standard of the sycee must be specified.

The writer Sun tells me that when salaries were paid in Ts'ao-p'ing taels the equivalent realized for 100 taels was 107.143 Shanghai taels, the calculation being—

	Ts'ao-p'ing taels.
To	100.00
Add for premium	5.00
Ts'ao-p'ing taels	105.00

[a] Not uniform at different places.

(That is, 105 taels Ts'ao-p'ing (without premium) equal 100 Ts'ao-p'ing taels with 5 taels premium as the standard.)

98 Ts'ao-p'ing taels being taken to equal 100 Shanghai taels—

Ts'ao-p'ing Tls. 98 : Shanghai Tls. 100 : : Ts'ao-p'ing Tls. 105 : 107.1428.

```
98 ) 105 ( 107.1428
     98
     ——
      700
      686
      ———
       140
        98
       ———
        420
        392
        ———
         280
         196
         ———
          840
          784
          ———
           56
```

100 Ts'ao-p'ing taels weight of sycee at 2.5 premium=107.143 taels Shanghai.

I am far from submitting these notes as authoritative; but offer them mainly with a view to indicating the field for inquiry in this connexion.

PASCAL MARTIN.

SHANGHAI, *20th October, 1880.*

COPY OF A LIST PREPARED BY THE WRITER SUN.

Haikwan Tls. 100	=Shanghai Tls.	111.4.0.0	
	=K'u-p'ing Tls.	101.6.4.2	(from multiplying 91.24 by 111.4)
	=Ts'ao-p'ing Tls.	103.9.7.3	(from multiplying 93.333 by 111.4)
Shanghai Tls. 100	=Ku-p'ing Tls.	91.2.4.0	
	=Haikwan Tls.	89.7.6.6	
	=Ts'ao-p'ing Tls.	93.3.3.3	
Ts'ao-p'ing Tls. 100	=Shanghai Tls.	107.1.4.3	
K'u-p'ing Tls. 100	=Shanghai Tls.	109.6.0.0	

Memo. re silver of various sorts at Shanghai, with values and weights; 1895.

1. Shanghai is the great trading center; all kinds of merchandise arrive and depart and many banks are open there, doing large business.

2. Accounts are kept in Shanghai taels, called kuei yin, also called tau qui yin, also called chiao pai yin.

3. There are also Ts'ao-p'ing taels and K'u-p'ing taels and Kuan-p'ing taels.

4. For Ts'ao-p'ing and K'u-p'ing taels there are scales and weights, but the Kuei-p'ing and Kuan-p'ing taels are names or designations of value simply, and there are no corresponding scales and weights.

5. There is a Kung-ku office for testing and valuing silver at Shanghai.

6. When silver is brought to this Kung-ku office it is weighed with the Ts'ao-p'ing scales and weights which were used by the merchants in the grain and pulse trade before the treaties opened the port. The office then writes on the silver its weight in Ts'ao-p'ing taels and also its touch or quality. A subsequent calculation has to be made to fix its value in Kuei-p'ing, K'u-p'ing, or Kuan-p'ing taels.

7. Ninety-eight Ts'ao-p'ing taels are equal to 100 kuei yin taesl; but as there are no Kuei-p'ing scales and weights, it is not known whether this difference is a discount on weight or on touch. Formerly the tau kuei yin was styled ——— or yüan-ssŭ yin, and then was made up of small round cakes weighing about 1 tael each; and as for kuei yin, when compared with the Kung-ku's present standard, its quality is expressed thus: Chü hsui erh shi, which means 100 taels weight of kuei yin silver has a discount of 2 taels and is taken as being only 98 taels.

8. The yüan-ssŭ silver is now not met with. Current silver or sycee varies in touch from 4 to 6 degrees of betterness; and these degrees are expressed in kuei yin taels.

9. When asked to calculate on the suan-pan the value of 100 taels Ts'ao-p'ing in kuei yin silver, a Shanghai banker—

	Taels.
Will first put down	100
Will add for betterness 5 per cent	5 [105]
For Tls. 100 will add 2 per cent	2 [107]
For Tls. 7 will add 2 per cent	0. 14
For Tls. 0.14 will add 2 per cent	0. 0028
For Tls. 0.0028 will add 2 per cent	0. 000056
And the result will be Shanghai silver	107. 142856

10. Similarly, if the value of 100 K'u-p'ing taels is to be expressed in Shanghai silver—seeing that the standard for K'u-p'ing silver is said to be 5.60 taels and that 100 K'u-p'ing taels equal 101.80 Ts'ao-p'ing taels in weight, a banker would—

	Taels.
First of all set down	100
Add for weight	1. 80
Add for touch	5. 60
Thus making Ts'ao-p'ing taels	107. 40

equal to 100 K'u-p'ing taels, and further calculation shows that as 98 Ts'ao-p'ing taels are equal to 100 Shanghai taels, so 107.40 Ts'ao-p'ing taels are equal to 109.60 Shanghai taels; therefore, 100 K'u-p'ing taels equal 109.60 Shanghai taels.

11. So, too, in the case of the Haikwan tael—inasmuch as 100 Haikwan taels equal in weight 102.80 Ts'ao-p'ing taels and the touch is said to be 6 taels on 100 taels weight, a banker would—

	Taels.
First of all set down	100
Add for weight	2. 80
Add for touch, at Haikwan taels 6 per cent on 102.80	6. 168
Add for meltage	0. 204
Thus making Ts'ao-p'ing taels	109. 172

equal 100 Haikwan taels. But as 98 Ts'ao-p'ing taels are equal to 100 Shanghai taels, so 109.172 Ts'ao-p'ing taels are equal to 111.4 Shanghai taels; that is, 100 Haikwan taels equal 111.4 Shanghai taels.

12. As regards comparative values, therefore, the following may be taken as the standard:

Ts'ao-p'ing Tls.	100	=	Shanghai Tls.	107.1.4.3
K'u-p'ing Tls.	100	=	Shanghai Tls.	109.6.0.0
Haikwan Tls.	100	=	Shanghai Tls.	111.4.0.0
Shanghai Tls.	100	=	K'u-p'ing Tls.	91.2.4.0
		i.e.,	Haikwan Tls.	89.7.6.6
		i.e.,	Ts'ao-p'ing Tls.	93.3.3.3

13. What precedes refers chiefly to comparative values; accordingly, if one desires to know how many English pounds sterling can be bought in London with so much Haikwan or K'u-p'ing or Ts'ao-p'ing silver at Shanghai, he has only to ask the market remitting rate for Shanghai kuei yin and calculate accordingly. Just now 3 English shillings is the exchange value of the Shanghai kuei yin tael; that is, 1,000 Shanghai taels will buy a draft for 3,000 shillings, i.e., £150.

14. If one asks about weights without reference to touch of silver or any such items, the following figures give the results of comparisons of weights made at the Kung-ku, Taot'ai's yamên, and foreign French and English banks at Shanghai (the Ts'ao-p'ing scales and weights are the bases of all calculations):

101.80 Ts'ao-p'ing taels=100 K'u-p'ing taels.
102.80 Ts'ao-p'ing taels=100 Haikwan taels.
1 Ts'ao-p'ing tael in English weight weighs 565.6375 grains.
1 Ts'ao-p'ing tael in French weight weighs 36.6527 grams.
1 K'u-p'ing tael weighs .... { 575.82 grains. 37.312 grams.
1 Haikwan tael should weigh............ { 581.47 grains. 37.68 grams.

15. Accordingly, if we discuss money and remittances from Shanghai to London, and if 1,096 Shanghai taels equal 1,000 K'u-p'ing taels, and if the exchange value of the Shanghai tael is 3 shillings, then 200,000,000 K'u-p'ing taels are equal to 219,200,000 Shanghai taels, and therefore would buy £32,880,000. If we discuss weights and purchase of the commodity silver by weight, then, inasmuch as 480 grains equal one ounce, and one K'u-p'ing tael weighs 575.82 grains, 200,000,000 K'u-p'ing taels weight will equal 115,164,000,000 grains, i. e., 239,925,000 ounces; and, further, seeing that at present bar silver is quoted at 30$\frac{9}{16}$ d. per ounce, 239,925,000 ounces of silver would cost in London £30,552,949 4s. 4½d. But of course the simultaneous purchase of so large a quantity of silver would probably send up its price, and freight, etc., would have to be paid on it from London to Shanghai; so that to lay down in Shanghai 200,000,000 K'u-p'ing taels weight of bar silver bought in London would in the end cost more than 3,055 wan pounds sterling of mere figuring calculation. There would, besides, be the time required to bring out so much—possibly two or three months.

16. If it is said that a Chinese tael weight is equal to 579.84 grains, the tael spoken of is the Canton tael and originated in 1770 (Chien Lung 34th year) with the 13 factories at Canton before the treaties. According to the treaty tariff rules 100 Chinese catties are equal to 133⅓ pounds $\frac{\text{coarse weight}}{\text{avoirdupois}}$; therefore, one Chinese tael will weigh $\frac{1.333}{1\frac{1}{3}}$ ounces $\frac{\text{coarse weight}}{\text{avoirdupois}}$, i. e., 1,215 ounces, i. e., 583.20 grains $\frac{\text{fine weight}}{\text{troy}}$, or French weight 37.783 grams. But really the Canton

tael ordinarily used is one-half per cent lighter, weighing only 37.58 French grams, or 579.84 English grains.

20. IX. '95.

K'u-p'ing weights.

1. In transactions between Chinese and foreigners the Canton tael is the one in general use, as the port from which it takes its name is the one which was first opened to foreign trade in China.

According to the supplementary Franco-Chinese and Anglo-Chinese treaties signed at Shanghai in November, 1858, the Canton tael ought to weigh—

In French weight, 37.783 grams.
In English weight, 1.333 ounces avoirdupois=1.215 ounces troy, or
=24.30 pennyweights.
=583.20 grains.

These proportions are based on the convention made at Canton, in 1770, between the supercargoes of the old East India Company and the privileged Chinese merchants who formerly there possessed the monopoly of the trade with foreigners.

But in reality the Canton tael, as in ordinary use in China, is ½ per cent lighter than the above-mentioned standard and does not weigh more than 37.58 French grams (according to the scales of the agency of the Comptoir d'Escompte de Paris); according to the basis adopted by the English banks:

1.208 ounces troy weight.
24.16 pennyweights.
579.84 grains.

* * * * * * *

2. The Ts'ao-p'ing tael weight of brass is the basis of all monetary calculations when the value of sycee is in question, it being used for weighing the sycee.

I have compared the troy weights of the Comptoir with the Ts'ao-p'ing weights at the Comptoir, the Haikwan Bank, and the Kung-ku office, with results varying from 565.72 grains to 565.56 grains as the weight of 1 Ts'ao-p'ing tael; but, as the weights of the Kung-ku office are accepted as the local standard and their balances considered to be accurate, I prefer taking the weight ascertained there to an average of several weighings at different places. By the Kung-ku weights a brass weight of 100 ounces troy weighed 84.86 Ts'ao-p'ing taels.

100 ounces=48,000 grains÷84.86=565.6375.
1 Ts'ao-p'ing tael weighs 565.6375 grains.
1 Ts'ao-p'ing tael weighs (or should weigh) 36.6527 grams.

Also by the Kung-ku weights—

101.80 Ts'ao-p'ing taels weight=100 K'u-p'ing taels weight.

* * * * * * *

3. *K'u-p'ing taels.*—As to weight: I procured from the Haikwan Bank a set of brass weights with the characters K'u-p'ing cut on them, which were compared for me at the Kung-ku office with the sets of troy and gram weights from the Comptoir, as well as with the Kung-ku Ts'ao-p'ing weights. It was found that the 50-tael K'u-p'ing weight weighed 50.90 Ts'ao-p'ing taels, and it was indorsed accordingly; hence—

100 K'u-p'ing taels weigh 101.80 Ts'ao-p'ing taels.

For the sake of uniformity, we may multiply the weight obtained for the Ts'ao-p'ing tael, viz., 565.637 grains, by 101.80, the proportion given above, and take the result, 575.818 grains, as the weight of the K'u-p'ing tael.

1 K'u-p'ing tael weighs (or should weigh) 575.82 grains.
1 K'u-p'ing tael weighs (or should weigh) 37.312 grams.

* * * * * * *

(The above extracts are taken from memoranda drawn up by M. Pietsch, of the Comptoir d'Escompte, in 1864, and Mr. P. Martin, of the Shanghai customs, in 1880.)

(*c*) SCARCITY OF COPPER CASH—MR. WOODRUFF'S REMEDIAL SUGGESTIONS—V. OFFICE SERIES, CUSTOMS PAPERS, No. 50.

Memorials to the Throne from several provinces having recently drawn prominent attention to the inconvenience and distress caused by a steady rise in the value of the ordinary Chinese medium of exchange—the copper cash—as measured by silver, the accompanying dispatch from Mr. Woodruff, commissioner of customs, suggesting a line of policy for adoption by the Government to restore the cash to its former stable position, is now issued for the use of the service.

By order.

ALFRED E. HIPPISLEY,
Chief Secretary

INSPECTORATE-GENERAL OF CUSTOMS,
Peking, August 13, 1896.

No. 1337.]

CUSTOM-HOUSE,
Ichang, June 30, 1896.

SIR: On the 11th of March the governor of Hupeh, and on the 23d of May the viceroy and governor jointly fixed a relative rate between Hupeh dollars, dollar and cash notes, and copper cash. I beg to inclose copies of the proclamations, with Mr. Parr's translations.

The fixing of the rate was to remedy the present most harmful "dearness" of cash, but the scheme has been rendered nugatory if, as reported, the Government offices do not accept it; and for them it would be revolutionary, as it is well known that a considerable portion of their income is derived from a manipulation of the exchange between silver and cash. There is, however, a practical palliative for a part of the evil.

The "dearness" is apparently due partly to a fall in the value of silver and partly to a scarcity of the cash.

The instability in the value of silver is caused by the irregular diminution of demand in western countries, and can be remedied only by international bimetallism. When this comes in and silver, again linked with gold, consequently fluctuates less than now with other commodities, when there has been a root and branch reform of China's system of official salaries and official accounts, and when its currency is imperially, not provincially, managed, it will be possible to make cash token coin, rate them to silver, and keep the two interchangeable at par. But until part at least of this has come to pass there is no remedy for the fluctuations in exchange between silver and cash.

The consequences of these fluctuations would obviously only be worse were silver legal tender in China by tael instead of, as now, by weight and purity. Standard silver coins should be avoided until the world has returned to its senses.

As to the other part of the evil—the scarcity of cash—its original cause was probably insufficient Government coinage. To supply the deficiency there has been an unusual influx of inferior cash, which, making the good cash the "dearer" money, has inevitably tended to drive it out of circulation into the melting pot and elsewhere. Partially effective prohibition of the inferior cash has increased the stringency.

Attempts have already been made in the right direction by issuing new cash from the new mints. I venture to suggest that the Imperial Government go further, and—

1. Assumé, through deputies, a closer direction of the provincial mintage to insure uniformity, continuity, etc.

2. Proclaim to the people that after a date named the old cash will no longer be legal tender; that one pattern of the new cash has been selected and made legal tender for the whole of China; that all old cash brought to the mints will be re-minted without fee into new cash, and that all material (i. e., the selected metals in their due proportions) brought to the mints will be minted without fee.

3. Itself buy up and remint old cash, and while the great dearth continues even buy material and mint new cash for Government expenditure.

4. Put the whole strength of the two new mints, day and night, into the minting of new cash, even to the deferring, if necessary, of the silver coinage, and encourage the establishment of more branch mints with foreign machinery.

5. After the issue of the new cash is fairly under way, see that the inferior cash in circulation are confiscated and destroyed.

So long as cash are "dear" because of scarcity there will be a profit in the metals when coined that will attract people to the mints. When the volume of the new cash becomes sufficient for the needs of trade their currency value will necessarily approximate their intrinsic value (cost) relatively with commodities in general, including silver, and the mints thus merely providing a market for the metals at the market price will become less attractive. If the cash become redundant they will be less profitable as currency than as metals. In brief, under this system, China's cash currency—its only standard coinage—would be, as all currencies should be, automatic, and once established the Government would only have to provide the people with facilities for its free coinage.

If silver continues to fall in value, cash, freed from the "dearness" of scarcity, and therefore to that extent less "dear" in silver, must still be "dear" when measured in it, and if China is not reformed the exchange will still be manipulated by interested persons; but the present unusual fluctuations of cash relatively with commodities (that exist, however, disguised in retail price by well-known devices) will be rendered to the benefit of everybody but the money changers.

I have, etc.,

F. E. Woodruff,
Commissioner of Customs.

Sir Robert Hart, Bart., G. C. M. G.,
Inspector-General of Customs, Peking.

[Inclosure No. 3.]

The governor of Hupeh in the matter of issuing a proclamation.

Formerly a string of cash was equivalent to a little over 6 mace in silver. Since last year, however, the price has been daily increasing. At present a string is equal to as much as 8 mace 2 candarins, a price not hitherto reached. Though this "dearness" is generally attributed to insufficiency of cash, yet it is doubtful if hoarding for speculative purposes and smuggling out of the country have not also largely contributed to bring this about. If, therefore, this state of things is allowed to continue, not only will the market be affected, but the poor people will suffer seriously in their efforts to gain a livelihood. It now becomes necessary to think of some means to remedy this evil; steps must be taken to lower the high price of cash.

Let the rate for cash be fixed at Hankow taels o. 7. 3. o. per thousand.

Let the Shan-hou-chü (a kind of large Government council) appropriate 100,000 strings of standard cash from the revenue collected and issue notes of 1,000 cash each, equal to 7 mace 3 candarins in silver, both to be put into immediate circulation.

Let the treasurer provide silver for the Hupeh mint, to be coined into dollars, and let these dollars be each worth 1,000 standard cash.

These measures are adopted in the hope that the dollars and notes may supplement the copper cash in circulation, so as to restore it to its normal rate and at the same time meet the increased demand.

The provincial treasurer and the taotai of the Shan-hou-chü having requested me to notify the people to the above effect, I, besides giving instructions to all officials concerned, hereby issue this proclamation for the information of all officials, merchants, soldiers, citizens, and others. When you transact business, pay duties, taxes, and all other Government dues, or receive money from the Government, remember that treasury notes and local dollars are legal tender, each note of 1,000 cash to be equivalent to Hankow taels o. 7. 3. o. and each dollar to 1,000 standard cash. These are fixed rates, so if merchants or others dare to disobey my orders by again raising the rate of cash or by hoarding for speculative purposes, etc., they shall, when discovered, be severely punished. On the other hand, if, when the people pay taxes, duties, etc., any customs official or district magistrate refuses to accept the above-mentioned dollars or notes, he will, on the charge being proved, be impeached.

Let all obey this without hesitation.

A special proclamation.

Kuang Hsü, 22d year, 1st moon, 28th day.

[Inclosure 4.]

Chang, button of the first class, president of the board of war, vice-president of the imperial censorate, viceroy, and in supreme control of the military and commissariat departments in Hunan and Hupeh; and T'an, button of the first class, vice-president of the board of war, second vice-president of the imperial censorate, t'i-tu of Hupeh, Wuchang, etc., in the matter of issuing a proclamation.

We obtained some time ago, through a memorial to the Throne, permission to establish mints at Wuchang to coin silver dollars for circulation in the different provinces. Owing to the scarcity of "standard" cash in Hupeh it was subsequently decided to give the silver dollar a fixed "cash" value, and to order it to be accepted as legal tender in payment of land taxes, customs duties, likin, and salt tax.

Since many provinces had their own dollars, and since the dollars coined by any particular province could only be used in payment of the Government taxes of that province, it was ultimately discovered that, in order to prevent complications, they should bear on their faces the name of place or province where coined. Notice to this effect has already been given.

We now find that the troubles caused by the cash question are daily increasing, and have therefore evolved a plan to remedy this evil. We have instructed the provincial treasurer to establish a government bank at Wuchang for the purpose of buying and selling copper cash and silver dollars.

We also find that the moneys annually collected in payment of land taxes, likin duties, etc., amount to large sums, and that a scarcity of standard cash is experienced in the country as well as in the cities; indeed, the many ways devised by the people, and the difficulties they meet with when attempting to buy standard cash for the purpose of paying taxes, can easily be imagined.

Now, the reform of the currency must begin with the cash issued in payment of public taxes. Since, therefore, a silver dollar is partially to supersede copper cash, it must be given a fixed "cash" value for public convenience.

Let one silver dollar coined by this province be equivalent to 1,000 standard cash, and let merchants and others buy them at this rate and pay the customs officials and magistrates with them at the same rate—there shall not be the slightest discount—so as to insure public confidence.

Meanwhile additional machinery will be purchased to enable the mints to coin 50, 10, and 5 cent pieces, all to bear the name of the province, and to be valued at a proportionate rate of 1,000 cash to the dollar, and to be used in the same way as standard cash. Dollar notes bearing the seal of the provincial treasurer will also be issued and put into circulation concurrently with the 1,000-cash notes issued by the Shan-hou-chü, so that the latter may not run short.

Let it be known to soldiers, citizens, etc., that though standard cash are scarce, the local dollars and cash and dollar notes are the same as standard cash; let three kinds of currency be in circulation among the people.

From the wealthy trader to the humble peasant, whoever uses the above-mentioned dollars and notes in paying taxes will thus be enabled to do so with greater facility.

In cases where silver is required instead of cash, let one dollar be equal to the silver value of 1,000 cash.

Dollars are easily carried and are not cumbersome, and after they have been in circulation for some time they can not fail to restore the price of copper cash to its normal state.

We are informed that when the people pay taxes, likin, etc., the officials, shupan, clerks, etc., purposely object to the size of the cash paid, and would accept only the largest coins; they even go so far as

to exact illegal fees. These abominable practices are truly regrettable. Now, since there are dollars and dollar and cash notes, the officials must be ready to accept them as legal currency as soon as they are presented. No exaction is to be allowed in future; and we also hereby warn magistrates and customs officials that if they refuse to accept the dollars, etc., mentioned above on any pretext whatever, or raise objections for the purpose of extorting money, they will be impeached or otherwise severely punished after the charge brought against them by the suffering merchant shall have been proved.

This important step is taken to remedy the evils of the cash currency, out of pity for merchants and others. The above rules shall and must be carried into effect, and the evil designs of shŭpan, etc., can never interfere with their being enforced.

Let this be obeyed by all.

A special proclamation.

Kuang Haü, 22nd year, 4th moon, 11th day.

(*d*) CHINA'S DEFECTIVE CURRENCY.—MR. WOODRUFF'S REMEDIAL SUGGESTIONS (WITH NOTES BY DR. J. EDKINS).—CUSTOMS PAPERS NO. 52.

1. On March 11, 1896, the governor of Hupeh, and on May 23, the viceroy and governor jointly, fixed a relative rate between Hupeh dollars, standard copper cash, and cash and dollar notes. The most excellent purpose of their proclamations was to remedy the present harmful "dearness" of cash; but it is stated that difficulties for both officials and people have, unhappily, made it impossible to carry out the plan.

2. *The relative rate.*—Formerly western countries had a joint standard of silver and gold at 15 or 16 to 1; but, later, Great Britain, Germany, France, the United States, and other nations suddenly changed to a single gold standard, to the great disturbance, these twenty years or more, of the market values of silver and gold, in which the markets of China have necessarily shared, so that its officials and people must dread that the rate of to-day would be loss on the morrow. In view of this, it would seem best to temporarily continue to exchange cash by tael, and silver by weight and purity at the rate of the day; but the single gold standard is doing world-wide harm, and in time all countries must unite in an international agreement for the former joint standard, and then China can rate cash to silver.

3. *The dearness of cash.*—Whereas at Ichang in 1882–83, 1,000 standard cash were obtained for Ichang 0.58 taels of silver 990 fine, now they cost 0.86 taels, to the affliction of the people. This dearness is due to both a lessening in value of silver and the increasing scarcity of cash. The lessening of the value of silver has been caused by the western nations giving gold a monopoly as standard money and setting silver aside. Until there is an international agreement, China has no remedy. As to the scarcity of cash, there has been but little minting these twenty or thirty years—people having taken advantage of the insufficiency to secretly coin and circulate small cash. In trade, one wishes to keep the larger and part with the smaller, but so the large cash have been hoarded or melted to make utensils, and necessary prohibition by Government of the coining and circulating of the unlawful cash, has intensified the dearth. Evidently, then, although the fall in

the value of silver is beyond China's control, it is within its power to remedy the scarcity of cash.

4. *Remedial suggestions.*—Feeling sorrow for the distress of the people, the Government has already had cash minted, but it is stated that the new cash do not circulate nationally and may prove inadequate. In this connection it is suggested that—

(*a*) The coinage departments of the board of revenue and works should decide on the materials of which a national cash is to be coined. There should be more than one ingredient (as in the reign of Kien Lung, for example, copper, zinc, lead, and tin were so used), in the hope of a greater stability in their aggregate market value, which should be approximately the same as in the old standard cash.

(*b*) The new cash should be improved by the use of machinery, but should be similar in appearance to the old, so that they may circulate the more readily as being only a new minting of old cash.

(*c*) The people should be notified that after a date named the old cash will be prohibited.

(*d*) In advance of that date, but only so long as the present dearth continues, the mints should buy old cash and either recoin them into new cash, or melt them and sell the materials, and should, in addition, buy fresh materials to coin into new cash. The new cash should be used either in Government expenditures or to exchange with the people for old cash.

(*e*) The public should be notified that before the date named all old cash should be taken to the mints to be recoined. If at the moment the mints have no new cash ready, the people are to wait for them; if there are new cash ready the mints are to issue them at once and afterwards recoin, or melt and sell the old cash. Old standard cash should be given new cash in exchange to their face value; old small cash, to their market value. No fee should be charged.

(*f*) The public should also be permitted to bring the materials for new cash and have them coined into or exchanged for new cash free of charge.

(*g*) So long as the dearth continues the mints should work night and day to provide a sufficiency, even if this temporarily delays the coinage of silver.

(*h*) At the date named, when new cash are in sufficiency everywhere, all old cash still in circulation should be confiscated and recoined or the materials sold.

(*i*) After the date named the people should still be permitted to at any time take the materials to the mints and have them coined into cash free of charge.

5. *Free coinage of cash.*—The Government already pays the mint expenses of the cash it issues; the only change would be that instead of issuing as many as it thinks the people will need it should provide as many as the people have found that they need. For when cash are dear because of scarcity, the metals of which they are made are worth more in them than in the market, so people would bring them to the mints for the profits through free coinage. When the cash become sufficient the metals are worth no more in them than in the market, and people will cease to be eager. When they are redundant the metals will be worth most in the market. The overstocked cash shops must devise ways to avoid loss, and not only will no one take metals to the mints but cash will be sent to other places or melted to obtain the market profit on the materials.

This is the method of western countries with gold and silver. If it were adopted by China for cash, not only would there be no cash famines, but unprincipled men would no longer have opportunities to, by means of the dearth, oppress the people. Freedom from the fear of these evils would facilitate trade, and the consequently increased revenue would far more than recoup the Government's coinage expenses.

6. *Silver currency difficulties.*—The mints with foreign machinery have coined a limited number of dollars, and foreign dollars are used to some extent, but for the rest the silver currency is sycee, exchanged by weight and purity. The chief defects are—

(*a*) The Chinese money balances are not accurate, no two giving exactly the same result.

(*b*) There are different units of weight. Besides the customs and treasury taels every province has its own market and other taels, all differing from each other.

(*c*) The work of the assay offices is too crude to inspire confidence.

(*d*) The purity of the sycee current in one place differs from that in another, so that, for example, Hupeh sycee does not circulate in Kiangnan.

Because of these defects there are constant disputes over the weight and purity of the sycee that waste time and money and are a serious obstacle to trade.

7. *Remedial suggestions.*—As most important it is suggested that—

(*a*) Every official treasury and every mint should procure a delicate money balance of western make to serve as a standard, which should be in exact agreement with the foreign balance used at the Canton mint.

(*b*) The weight of a customs and a treasury tael's-weight of pure silver, expressed in grams or grains troy, should be, respectively, the standard of the customs and treasury taels, and each province should similarly fix the standards of its market and other taels.

(*c*) The fineness of the Chinese and of the current foreign dollars should be notified.

(*d*) China's standard silver dollars should be 900 fine, in agreement with the United States, the Latin Union, and Japan.

(*e*) It should be notified that fractional silver coins less than 900 fine issued by the Government will, on presentation at the mint or treasury, be given standard dollars to their face value in exchange without charge.

(*f*) Temporarily, all sycee stamped by an assay office brought to a mint should be scientifically refined into silver 900 fine, stamped with "900 fine" and the weight in customs taels, and returned without charge.

8. *Taxes.*—It is further suggested that after a date named the moneys received for taxes, besides, as at present, accepting standard cash at their market value, shall only be undefaced Chinese dollars, foreign dollars, in the fineness of which has been notified, and sycee stamped 900 fine by the mints—all reckoned by the weight of the pure silver in them. When the Chinese dollars and 900 fine sycee become sufficient, a date should be again named after which foreign coins will be received.

9. *The mints.*—China's territory is extensive, its population large, and its need for cash pressing. More mints with foreign machinery

should be established at important points through the provinces to mint both dollars and cash.

10. *A national currency.*—It is essential that the copper cash, Chinese silver coins, and mint-stamped sycee, from whatever mint, should be uniform, in order that they may be current throughout China. Not only should there be one mint law for all the provinces, but all provinces should execute it uniformly. The coinage departments of the board of revenue and works should therefore station deputies well versed in the mint enactments at the mints to cooperate with the superintendents, and should also periodically send competent inspectors to visit and report on the mints, that absolute uniformity of coinage throughout the Empire may be insured.

11. *The cash standard.*—China's present standard of copper cash, with silver current by weight and purity, is inferior to the Western system of a free coinage of standard gold and silver money, the Governments themselves issuing the silver and copper token coins; but at present the market values of gold and silver throughout the world are greatly disturbed, and it seems best for China to temporarily pursue the course suggested in this paper. When an international monetary agreement has been effected, China can make gold and silver the standard, and again itself issue the cash, and then a relative rate can be fixed between cash and dollars.

F. E. Woodruff,
Commissioner of Customs.

Custom-House, *Ichang*, *December 4, 1896.*

NOTES.

2. *The relative rate.*—Since Great Britain adopted the gold standard about eighty years ago, the sudden change of standard should be said to refer to Germany, France, and the United States of America, and Great Britain should not be included.

It would be well to say that China, instead of waiting for the future action of the western powers in modifying the present standard of currency, should herself take a decided part in negotiations with western powers on this point. She should win them over, one by one, to bimetallic views, viz., Japan, the United States, Russia, Germany, and France. In order to do this effectually, China should have a foreign adviser on currency, to assist the board of revenue. China should provide from the archives of the revenue board and of the treasurer's yamên in each province statistical particulars showing the amount of cash and of silver in circulation. This is an important point, because the opinion of Chinese financiers would have weight in international negotiations in proportion to the amount of China's internal and foreign trade as measured by the volume of her currency.

3. *The dearness of cash.*—The dearness of cash, due to want of minting during late years, is being fast removed. The native correspondents in the papers express surprise that in cities where new cash are in the market no important change in the copper cash value of silver is noticeable. The reason of this is that what is called dearness of cash is really cheapness of silver. Where new cash have been made

in the largest quantities, the exchange is still not materially improved; this shows that the main evil from which China suffers in regard to money is the cheapness of silver.

In the tightness of money it is not known what is the proportion which is due to the scarcity of cash, and what proportion is due to the fall of silver.

9. *Silver currency difficulties.*—While silver is cheap, China might just as well buy Mexicans for her use as to make dollars for herself. The time is scarcely come for a silver currency. The Chinese say themselves that Thibet has silver coinage, because there is silver in Thibet; and that China has copper currency, because China has copper. But this is not all. Copper cash are suited to China as dollars are not: this has been so in the past. Now, however, through the immense amount of copper in use, market prices have changed; 3 cash buy as much food as 1 cash bought formerly. This opens a door for the entrance of dollars. The Chinese, however, need be in no hurry to mint them while they can get Mexicans and British dollars at so cheap a rate, as long as foreign dollars are preferred by the commercial class.

10. *A national currency.*—In securing a national currency with uniformity in the coins it would be a great advantage to have all the cash made in Yunnan, where copper is found with several prefectures. It would cost no more to export the cash when made than it does to convey the copper. There were formerly cash made at Mentgsz. Here a mint might be organized under foreign superintendence having connection with the customs establishment there.

China should employ foreign financiers to assist the provincial treasurers, and they should do the work which inspectors of mints should have assigned to them.

11. *The cash standard.*—From A. D. 600 to 1700 the standard was on the whole steady, but with occasional variations 1,000 cash were equal to 1 tael of silver; 10,000 cash were equal to 1 tael of gold. In 1770 the tael of gold was equal to 15½ taels of silver. This change was caused by the appreciation of gold probably, but this has not yet been clearly shown. Yet the fact that 1,000 cash were still nearly equal to 1 tael of silver during the last century may be taken in evidence that the appreciation then observed was in gold. Thus it is shown that if Chinese financiers would bestir themselves they might be able to adduce facts in the history of money which, when brought before the next international conference on currency, would possibly have a decided effect on the minds of the members of the conference.

J. EDKINS.

2. EXTRACT OF REPORT MADE BY H. B. MORSE, OF THE CHINA BRANCH OF THE ROYAL ASIATIC SOCIETY.[a]

INTRODUCTION.

All nations have passed through the stage of chaos in their currency and measures. In western countries modern legislation has done much to reduce irregularity to order, though even there the old special units

[a] Mr. Morse collected his material by sending circular letters in the name of the Royal Asiatic Society to people in various parts of China conversant with the situation there. The statements give the nature of the investigation, the questions asked, and various extracts from the replies.

still linger on in common usage. In China some spasmodic efforts have been made from time to time to secure uniformity, but they have never gained much support, and, as will be seen from the following tables, chaos reigns supreme through the whole of the Empire. In many of the following contributions reference is made to the difficulty of finding any standard, even local.

An apology is due to the various contributors to this inquiry for not printing their papers as received; it is hoped, however, that they will recognize the utility of presenting the information in summarized tables rather than giving detached information under all heads for each place. Where any contributor has given special information it has been appended in the shape of notes under the proper head.

I have not attempted to prepare any general summaries. The reason for this will be obvious, when, on referring to the tables, it is remarked that many provinces are unrepresented, many others only covered at a few points, and two only (Kansu and Kiangsu, the latter fairly completely) are adequately reported on. The apathy of the mercantile residents in China on this subject, which so closely affects their interests, is remarkable, not one paper having been received from any member of that influential body, and were it not for the efforts on their behalf made by the missionaries, Catholic and Protestant, this inquiry would have had no result.

An earnest appeal is made to all residents in China, whether members of the society or not, to contribute further information on this important subject. There are three points to be kept in view:

1. To check and (if wrong) rectify the statements made in the tables now submitted.

2. To send full information on the lines of this paper regarding places not now reported on.

3. To thus collect the material for an intelligent summary of the currency and measures of China by some competent hand.

The paper now presented is only preliminary, and it is hoped that the society may soon be enabled to publish tables covering every part of China.

H. B. MORSE.

PAKHOI, *January 11, 1890.*

CIRCULAR ON CURRENCY AND MEASURES IN CHINA.

The points on which information is sought are as follows:

CURRENCY.

1. What are the kinds of tael of silver (the Haikwan or —— tael excluded) known in your district? Please give names in full, thus Hsiang-p'ing Hua-pao Yin, together with the colloquial name.

2. What is the actual weight in grains ($437\frac{1}{2}$ grains equal to one ounce avoirdupois) of the tael of each Ping (local scale)?

3. What is the touch or fineness of each of the several kinds of silver (pure silver being taken as 1,000 fine)?

4. In each tael of currency weighing (so many) grains, how many grains are there of pure silver (1,000 fine)?

5. How many taels of each of the currencies mentioned by you are considered to be the equivalent locally of 100 K'u-p'ing taels of pure silver?

6. What relation do Mexican dollars bear to the tael commonly used locally? (100 taels equals how many dollars).

7. What kinds of copper cash are used in your district? What is a Tiao, and what its value?

8. What relation do copper cash bear to the Mexican dollar and [or] the local tael?

9. To what extent are cash notes (paper money) used locally? If used at all please give some account of them.

10. Are bank notes (or bankers' checks) for silver used in your district otherwise than as checks?

Gold.

Rev. P. Hoang (1) states:

Gold ingots are not in common use in trade, but only for hoarding. Hoarded gold is generally in one of two forms. One is in ingots shaped like a small boat, about 0.09 meter (3.6 inches) long, 0.02 meter (0.8 inch) wide, and weighing 360 grams (5,555 grains equals 11.575 ounces troy); this is called Gin ten. The other is in the form of gold-leaf, measuring about 0.2 meter (8 inches) square, and weighing about 30 grams (463 grains); this gold-leaf is called Gin ye tze. The unit of value of gold is called huan; *e. g.*, if 1 ounce of gold is worth 18 ounces of silver, it is quoted Shih pai yin huan. The relative value of gold to silver was in the beginning of the Ming dynasty (1375) four times greater; under the Emperor Wan-li (1574) of the same dynasty, seven to eight times greater; at the end of the Ming dynasty (1635) ten times; under the Emperor Kang-hsi (1662) of the present dynasty, ten and more times; under the Emperor Kien-lung (1737) twenty times and more; in the middle of the reign of Tao-Kwang (1840) eighteen times; at the beginning of the reign of Hien-fung (1850) fourteen times; and at present (1882) generally eighteen times.

Silver and Copper Cash.

The report contains a table giving for various provinces, prefectures, and towns the names in both English and Chinese, of the tael or various taels in use there; the weight of the taels in grains and grams; the fineness of the silver in each, and the weight of the fine silver in grains and grams; the equivalent value of the special tael in Haikwan taels and in Ku'p'ing taels, and the value of the local taels in silver dollars. Besides this, an account is given of the copper cash in use in the different localities, there being given, first, the denomination; second, the actual number in the tiao, and, third, the tiao in 1 tael. A last column is left for notes.

In this table 78 different kinds of taels are enumerated of varying weights. It happens, of course, at times that two of these taels in different localities may be of the same weight, but speaking generally they vary each from the other. The heaviest tael in the list is the Haikwan tael, at 583.3 grains or 37.79 grams. The lightest seems to be the Quei-p'ing tael, 520 grains or 33.69 grams, in Wênchow-fu, Chekiang Province. The others vary all the way between these.

The actual number of copper cash in the tiao varies from 1,000, which is supposed to be the normal amount, to as low as 50 in Peking. From 480 to 500 seems to be not uncommon, and it is quite usual for a small discount of 2 to 20 cash to be made for the string.

Notes.

NOTE 1.—*Note on Tientsin currency.*—Of the two equivalent values given for the Hang-p'ing tael at Tientsin, the first (100 Haikwan taels equal 105 T'u taels) is the rate at which foreign merchants pay duties; the second (100 Haikwan taels equal 106.05 T'u taels) is the rate fixed for Chinese merchants in paying duties.

NOTE 6.—Rev. E. T. Williams (17) states:

1. *The tael.*—There are three kinds of tael commonly used in Nankin: The "K'u-p'ing," known also as "Süeh-hwa Yin," the "Ts'ao p'ing," called "Wăn Yin," and the "Siang-p'ing," or "Ti-ch'ao Yin."

As a matter of fact, however, these are three methods of reckoning rather than three kinds of tael. The "Ts'ao-p'ing" is the standard and the tael commonly used in Nankin. In "Ts'ao-p'ing" 100 taels are 100 taels, but if a transaction is conducted in "K'u-p'ing," to every 100 taels 2 taels must be added; that is, 100 "K'u-p'ing" taels are equal to 102 "Ts'ao-p'ing." 100 "Siang-p'ing" are but 98 "Ts'ao-p'ing." The "Ts'ao-p'ing" tael contains 563.72 grains. The "Siang-p'ing" is used in paying the army and the prizes awarded students at the semimonthly examinations, although the latter are supposed to be paid in "K'u-p'ing" taels. My Chinese teacher says it is a common saying among students that the prizes are awarded in "K'u-p'ing," the examining official pays them in "Ts'ao-p'ing," the minor officials distribute them in "Siang-p'ing," and by the time it reaches the student the tael has become a Mexican dollar, which, on being exchanged, is found to be bad.

I have not been been able to discover the fineness of the various kinds of silver or the number of grains of pure silver in each tael. To every such question the bankers I have asked answer that they do not know. They determine the relative value by touch and color, but say there is no established ratio. No doubt they are wrong, but I have not been able to push my inquiries farther.

A Mexican dollar by weight is said to be 0.74 tael, but it does not of course exchange at this rate. At present it is worth but 0.68 tael. A hundred taels are equal to 146.86 dollars.

2. *Cash.*—All the cash used in this region are of one denomination—about one fifteen-hundredth of a tael; but there is a large quantity of bad cash and small cash in circulation.

A tiao consists of ten strings or 974 good cash reckoned as 1,000. Each string contains nominally 100, but in reality only 98 or 95. The 95 cash string is called a "ti-tsz," and is indicated by a knot on the end of the string. In every tiao there are two ti-tsz. In three strings or more one may be a ti-tsz; in seven or more two ti-tsz are allowed.

On every string of good cash there may be two or three small cash or counterfeit cash; as a matter of fact there are many more.

These spurious cash are called by various names: "Ts'ing-pau," "hiao-p'ien-p'ien," "shui-shang-p'iao," a light, thin variety, said to float on water, the "sha-tsz-tsz," which contains a great deal of sand, and the "ngo-yen" in which the hole is very large and the coin very

small. This is not to be confounded with an ancient coin of the same name. Other names are: "Sui-ts'ien" and "lü-cheu-kw'an," so-called because much of this counterfeit cash was formerly made at a place of this name in Anhuei.

There is still another variety of small cash known as "hung-ts'ien," because made of red copper. It is of ancient manufacture, and, although spurious, passes as good coins on account of the quality of the copper. As many as five of this variety may be found on each string.

A Mexican dollar exchanges for 1,030 good cash in summer, and 1,080 in winter. A tael exchanges for from 1,500 to 1,600.

There are strings, however, known as "yih-kiu-tih," "'rh-pah-tih," and "san-ts'ih-tih," containing 10, 20, or 30 small, to 90, 80, or 70 large cash. One can, of course, exchange at a much higher rate for this sort of cash.

At the pawn shops a tiao is 1,000 in reality as well as nominally. No shortage is allowed. This is true, too, in the payment of taxes and of bank discount.

I presume it was not your purpose to inquire as to the dates of the coins or the inscriptions they bear. There is great variety in this respect, though most of the cash belongs to the present dynasty, by far the larger part bearing the style of Kien-lung. It is quite common, however, to find coins of the Sung dynasty, and there are many varieties issued by old-time rebel kings. It seems strange to a foreigner to find coins 200 years old in general circulation, but to be able to handle coins of the tenth century in this matter-of-fact way is simply marvelous. To the Chinese collector, of course, with his coins of 2,000 years ago, these seem quite modern. Most of the light, thin cash mentioned above as the "shui-shang-p'iao" bear the style "Kwang Chung T'ung Pao," are of unknown date, and are said to be of foreign coinage.[a]

In using large quantities of these small cash, 1,000 hung ts'ien best quality will pass for 900 cash, of medium grade 1,000 are equal to 800, and of poorest quality 1,000 are reckoned but 700 good cash. Of the ts'ing-pau there are three grades, rated respectively at 600, 700, and 800 cash per 1,000. There are three grades of the hiao-p'ien-p'ien also, which pass for 450, 500, and 550 per 1,000, and two grades of the sha-tsz'-tsz' which command 400 and 500 cash per 1,000.

4. *Spanish dollar.*—In addition to the varieties of currency just mentioned, the Spanish dollar is also very commonly used, its value compared with that of the Mexican dollar being as 10 to 8, that is, 8 Spanish dollars are equal to 10 Mexicans. The Spanish dollar exchanges here for from 1,200 to 1,300 cash. Going north from Nankin into the interior it is difficult to use the Mexican. Its exchange value falls as low as 900 cash, but the Spanish dollar is in demand in these districts.

5. *Hang Yin.*—A variety of silver used here, though for certain special purposes only, is the "Hang Yin."

This too, however, is simply a method of reckoning. A tael of the "Hang Yin" is but 700 cash. Its use seems confined to the payment of marriage and funeral directors and yamên runners.

NOTE 9.—Dr. D. J. Macgowan (18) states:

Ts'ao-p'ing tael is used in markets and all ordinary transactions.

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[a] These are Annamite.—H. B. M.

K'u-p'ing tael is used in paying taxes.

Hsiang-p'ing tael is used in paying volunteers—called hsiang, because Hupeh furnishes the greater portion of China's extemporized forces.

Chiang-p'ing tael is used in dealings with Ningpo merchants.

Kuei-p'ing tael (Kuei=usage) used in the Shanghai trade; the "usage" consists in discounting 98 taels=100.

Hsiang-p'ing tael (Hsiang=rations) is used to pay regular troops.

NOTE 10.—Mr. E. H. Parker (21) states, respecting Foochow:

The Hsin-i-p'ing tael is worth 2.4 per cent and the Hsiang-p'ing tael 3.3 per cent less than the K'u-p'ing tael. The K'u-p'ing tael being a definite weight in avoirdupois, anyone can calculate for himself the weight of the others. The Hsiang-p'ing was introduced during the rebellion, and is only used for paying the soldiers. For sales of land only an imaginary tael called Wên-kwang is used, and is always worth 800 large cash; this is to guard against variations in the silver market, and has no other practical exchange significance.

NOTE 13.—Rev. C. Bone (19) states, respecting Hsin-hui:

I have not been able to ascertain that there are any special names for the different taels, except the perfect tael, which is called Ch'u sze ma. This is the ancient tael and the ideal. In business, Mexican dollars are used, or broken dollars, and the "touch" of the silver will, of course, depend on the touch of the original dollars. There are, however, three kinds of tael in general use, and called after the business people among whom they obtain:

(*a*) In banks, warehouses, and retail shops in which corn, oil, and rice are sold the tael is reckoned at 997 instead of 1,000. (*b*) The tobacconist's tael is 998 instead of 1,000. (*c*) In purchase of land or houses the perfect tael is used, which is 1,000 or even slightly over. About 10 taels (sometimes a little more, sometimes a little less) must be added to 100 local taels to make them equal to the Government or ideal tael.

NOTE 18.—Regarding Shensi and Kansu, Rev. C. F. Hogg states:

From experience in several provinces, I should say that the local tael averages 1,500 cash in value all the year round. In Han Chung it has sunk to one thousand one hundred odd, and risen to close on 1,900. The demand for cash at the New Year increases its value. In Han Chung and Si-ngan the price of silver is usually between 1,500 and 1,600 cash. In Lanchou from 1,450 to 1,550. Rain, examinations, and the opium season increase the demand for cash and so raise its price.

PAPER MONEY.

Cash notes are common in many parts of the Empire, and are extensively used from their convenience. See especially the memorials of the governor of Kirin given in the North-China Herald, Vol. XLII, page 175, and Vol. XLIII, page 50. Silver notes, except those of the foreign banks, are not used at all. The remarks of the various contributors on this subject are abstracted as follows:

Shêng-king.—Niuchwang. Mr. W. B. Russell (29) states:

Cash notes are in circulation to the amount of about 3,000,000 tiaos or 300,000 taels. The reason why they are so cheerfully accepted in the market is because they are convenient to be carried and no exchange of debased cash is to be made.

No bank notes or checks are used locally.

Shensi—Kansu.—Rev. C. P. Hogg (22) states:

In Si-ngan, paper notes, value 1,000 (i. e. 500) and 2,000 (i. e. 1,000) cash, are issued and largely used. Spurious notes are afloat in quantities, so that neighboring money shops are usually appealed to before the notes change hands. In Lanchou, paper notes equivalent to 1,000 cash (actual value) are largely used also.

In Han Chung, oil-cloth notes are used—value 1,000 cash. Different hsiens and large towns in this and other fus also issue notes. The Han Chung fu notes present quite a creditable appearance, are stout, of a yellowish brown color, and are oiled after signature, or rather after value and cipher have been inserted; these appear to be the equivalent of the "signature" in Chinese bank notes. Banks sometimes shut their doors, but the notes of established houses are readily accepted without reference. Silver drafts may be given in payment for goods. They are always payable to bearer, notwithstanding that there may be no intimation of the fact in the document itself, and that the payee's name may be inserted in full. A special clause has been added at times by some of the Hankow bankers in drafts made payable to foreigners. Ch'u wên yin is interpreted relatively, the standard being the Ch'ai sē yin of the place on which the draft is drawn.

Kiangsu, Nanking.—Rev. E. T. Williams (17) states:

The use of paper money is very common in Nanking, especially of the 300, 400, 500, and 1,000 cash notes, called "p'iao-tsz." These are very well engraved and printed on good, strong paper in red and blue inks. A note of ordinary size is 7¼ inches long and 4¾ inches wide. The design consists of a border, usually made up (largely) of human figures. One before me, as I write, has a border composed of characters and scenes from some ancient drama. Within this is a second border, consisting of an extract from the classics in very small type. Inclosed by these borders is an oblong space containing the name of the bank, its location, the value of the note, its number and date, and the mark or style of the bank. Before being put in circulation the note must also bear the great seal of the bank upon its face. Each person, too, as the note passes through his hands, adds his private mark, so that it soon becomes defaced. There are also 2,000, 5,000, and even 100,000 cash "p'iao-tsz," but these are not so common. Notes for 50, 100, and 200 cash, printed upon red paper and called "t'iao-tsz," are used at New Year, chiefly for presents to children and servants. At other times they are rarely seen. The small foreign silver pieces are slowly taking the place of these. Silver notes are used in trade, but not to any great amount. Their use is almost wholly confined to merchants in their dealings with one another.

Regarding Ningpo in Chekiang, Dr. S. P. Barchet (16) states:

Paper money, as a universal and unquestioned tender, is unknown in Ningpo, but wholesale dealers (e. g., fishmongers) will give notes payable ten days after issue, which are readily taken instead of money, for they can be cashed by bearer at any time. Shops also issue cash or promissory notes, but these will not be paid till they fall due (usually from ten to forty days). Cash notes issued by small firms are risky in proportion to the length of time before they fall due. The greatest risk is incurred where parties borrow the name and credit of other firms, issuing cash notes in their name. It often happens that when such cash notes fall due they are not even then paid in hard cash, but in cash notes on somebody else and again on somebody else till the

last holder finds himself the loser. It is probably owing to such experience that cash notes are indorsed or verified, and when cash notes change hands reference is made to the original party issuing them, to have them again verified. This involves a great loss of time and makes most people prefer cash. When it is wished to have the amount paid into a bank or other firm a small deduction is made (from 5 to 10 cash on the dollar). Bank notes are not used otherwise than as checks.

Fukien, Foochow.—Mr. E. H. Parker (21) states:

Cash notes or ch'ien-p'iao for 100, 200, 300 cash are called p'iao-t'iao; for 400, 500, 600 they are called hsiao-p'iao. There are no others but for thousands, from one to ten, called ta-p'iao.

A check is called chi-ch'ien, tsz-t'iao. Bank notes range from 1 tael to 2,000 taels, and are called yin-p'iao.

[Extracts from North-China Herald for 1889.]

The currency question in Kirin—Excessive issue of paper money.

January 17.—The governor of Kirin states that the currency system of the town of Kirin is carried on on a most pernicious system, and as a remedy for the great inconvenience and suffering which it entails upon the people he suggests that a portion of the subsidy which the province receives yearly from Peking should in future be remitted in copper cash. Cash, he states, is the proper standard for the monetary requirements of the people, and paper money is only to be resorted to when it proves insufficient. If the latter could be made to circulate freely and the price of commodities, whether paid in cash or paper, could be equalized, it would prove a real convenience for the people, to which no objection could be raised, as in the other provinces where paper money is used to supplement the ordinary currency. In Kirin, however, the case is quite different. Here the notes no longer represent a cash value, and being inconvertible have given rise to abuses greater than any ever resulting from the financial expedients of the Sung dynasty. The commercial transactions of the town are all based on a gigantic system of credit, against which prohibitions have been issued from time to time without effect. The notes of the system lay in its convenience for use in the market where money was required to pass rapidly from hand to hand, and in course of time its use was extended until it assumed its present dimensions and afforded facilities to dishonest merchants for fraudulent practices and overtrading. The notes were put on the market without any regard to the capital possessed by the establishment issuing them, and people seeing that they could buy sycee or goods with mere paper, naturally preferred to hide away their cash, and make gain without employing money at all. Merchants who came to the city to trade, observing the high price of silver and articles of commerce, feared that they would lose heavily on any goods purchased there, and took their cash to other places where they could invest it better. The consequence was that there is an unusual scarcity of cash in Kirin, and that prices have gone up to an enormous height. The soldiers and officials suffered more than any other part of the population. By an old regulation a part of their

salary was paid out of the local revenue, and to begin with was issued at a discount of 20 per cent. The chief source of revenue is a tax upon distilleries paid in inconvertible paper, of which it took considerably over 4 tiao to make a tael, but which was issued to the officials and soldiers at the rate of 3 tiao to the tael. But this did not represent the total loss. The other cities in the province would not accept the inconvertible paper of Kirin; therefore the soldier was obliged, if he wished to return home, to exchange his paper money for silver at the current high market rates. When he reached home he had to convert his silver into cash, and as the price of silver was lower than in Kirin he again sustained a heavy loss. The country people who brought produce into town found themselves unable to sell it unless they took the price in paper money, and as this was utterly useless in the country they were obliged to exchange it at a ruinous loss before returning. Vendors of firewood, and other poor creatures who had carried heavy burdens from a long distance into the city, would often want a few cash to buy food to appease their hunger, and would find themselves unable to obtain it, to such a pitch had the abuses of the currency system attained. After a consultation with the local, civil, and military authorities, memorialist drew up a set of regulations for reducing the price of silver, and placing the copper and paper money on a uniform basis, and took steps to have them enforced among the mercantile community. During a specified period, when outstanding notes were presented for payment, at least 20 per cent of the amount was to be given in cash, and after the third moon of next year, the further issue of inconvertible paper was to be entirely discontinued. It is feared, however, that in making such a radical change, a difficulty might at first be experienced in obtaining cash to meet the requirements of trade. The late governor proposed to open a local mint for the coinage of cash, but the difficulty of procuring copper renders this scheme unsuited to the exigencies of the case. Kirin draws from the board of revenue in Peking quarterly subsidies for defense purposes, and half-yearly allowances for the maintenance of a drilled force in the province. It is suggested that of each of these payments, 10,000 taels should be issued in copper cash at an exchange of 3,000 cash to the tael, and be forwarded in carts to Kirin along with the remittances in silver. Or if it is thought better, the board might direct one of the provinces which coins copper cash and has communication by sea with Manchuria to forward a similar amount of cash by steamer to Niuchwang, whence it could be sent overland to Kirin, where it might be used in the payment of salaries instead of a direct remittance from the board.—Referred to the consideration of the board of revenue.—Ibid., p. 175.

The subject of Chinese currency demands not a brief paragraph, but a comprehensive essay, or rather a volume. Its chaotic eccentricities would drive any occidental nation to madness in a single generation, or more probably such gigantic evils would speedily work their own cure. In speaking of the disregard of accuracy we have mentioned a few of the more prominent annoyances. One hundred cash are not 100, and 1,000 cash are not 1,000, but some other and totally uncertain number, to be ascertained only by experience. In wide regions of the Empire 1 cash counts for 2, that is, it does so in numbers above 20, so

that when one hears that he is to be paid 500 cash he understands that he will receive 250 pieces, less the local abatement, which perpetually shifts in different places. There is a constant intermixture of small or spurious cash, leading to inevitable disputes between dealers in any commodity. At irregular intervals the local magistrates become impressed with the evil of this debasement of the currency and issue stern proclamations against it. This gives the swarm of underlings in the magistrate's yamên an opportunity to levy squeezes on all the cash shops in the district and to make the transaction of all business more or less difficult. Prices at once rise to meet the temporary necessity for pure cash. As soon as the paying ore in this vein is exhausted, and it is not worked to any extent, the bad cash return, but prices do not fall. Thus the irrepressible law by which the worse currency drives out the better is never for an instant suspended. The condition of the cash becomes worse and worse until, as in some parts of the Province of Honan, everyone goes to market with two entirely distinct sets of cash, one of which is the ordinary mixture of good with bad, and the other is composed exclusively of counterfeit pieces. Certain articles are paid for with the spurious cash only. But in regard to other commodities this is matter of special bargain, and accordingly there is for these articles a double market price. That enormous losses must result from such a state of things is, to any westerner, obvious at a glance, although the Chinese are so accustomed to inconveniences of this sort that they seem almost unconscious of their existence, and the evils are felt only as the pressure of the atmosphere is felt. Chinese cash is emphatically "filthy lucre." It can not be handled without contamination. The strings of 500 or 1,000 (nominal) pieces are exceedingly liable to break, which involves great trouble in recounting and retying. There is no uniformity of weight in the current copper cash, but all is both bulky and heavy. Cash to the value of a Mexican dollar weigh not less than 8 pounds avoirdupois. A few hundred cash are all that anyone can carry about in the little bags which are suspended for this purpose from the girdle. If it is desired to use a larger sum than a few strings the transportation becomes a serious matter. The losses on transactions in ingots of sycee are always great, and the person who uses them is inevitably cheated, both in buying and in selling. If he employs the bills of cash shops the difficulty is not greatly relieved, since those of one region are either wholly uncurrent in another region not far away, or will be taken only at a heavy discount, while the person who at last takes them to be redeemed has in prospect a certain battle with the harpies of the shop by which the bills were issued as to the quality of the cash which is to be paid for them. Under these grave disabilities the wonder is that the Chinese are able to do any business at all, and yet, as we daily perceive, they are so accustomed to these annoyances that their burden appears scarcely felt, and the only serious complaint on this score comes from foreigners.—Ibid., p. 411.

Want of control over the circulating medium.

About sixty years ago a student of Chinese history in Soochow made some deep researches into the question of the currency. The currency was then becoming more and more out of the reach of Government

control. Foreign trade was increasing. The Government had for nearly two centuries left silver to work its own way as money paid by weight, and received it in payment of taxes from each arrondissement. Only the copper cash were issued by the Government. For silver there was no mint and never had been but once, and that for a short time, yet this metal had grown to be one of the most important elements in domestic as well as foreign trade. It was the same with paper. Paper notes representing money were issued by private capitalists in all large cities, and the Government had no interest in them. Their success as a circulating representative of silver was entirely at the risk of the native bank. Silver and paper both represented money in all the large transactions of trade. The small market negotiations in copper cash, which belong to the daily life of the people, and which, while as transactions they are counted by millions, are always small in bulk, were the only trading operations of which the Government issued the circulating medium. How strikingly different was this state of things from that which exists in the West, where gold, silver, copper, nickel, and stamped paper are all issued by the governments as money. Our author knew nothing of this, of course, but he was still able to cast his eye over a wide range of financial facts. China had had a long history of financial experiments and a succession of prosperous and disappointing experiences. With the national annals before him, each dynasty having its special chapter on finance, it never struck him that China was, or could be, deficient in financial knowledge or unable to meet the new conditions of the time. He attempted to show that a change in policy was required in finance, and the conclusion he arrived at, and which he tried to prove by argument, was that a Government paper currency ought to be again issued and the use of silver prohibited. The people should attend to agriculture rather than to trade. This was their proper occupation, and would lead them to a spirit of contentment. The circulating medium of trade ought to be in the hands of the prince as a source of revenue.

The reasons, he said, why the monarch can not easily control the currency or derive revenue from it are fivefold. Coppersmiths melt coin because they wish to use the copper in making wash basins, tea-kettles, and images of the gods. This is the first interference with the monarch's authority. In addition to this, lead and spelter are employed to make spurious coin in the furnaces of law breakers aiming at a little profit. This is the second interference; and the third is the extending use of foreign dollars. (It is worthy of remark that through the whole of his book the author, writing in 1831, makes no allusion to opium; yet it is unquestionable that the spread of Spanish dollars first and American dollars afterwards was very much connected with the opium trade. At the same time he makes no allusion to the silk or the tea trade. His point is simply that it is a loss to the Chinese Government not to have the profit arising from the control of the currency. As to commercial questions he seems to have no information, nor did he seek any.) His fourth reason why the Government fails to derive benefit from the circulating medium is that the market price of silver is entirely in the hands of the merchants. He would like the Government to regulate the currency by authority—not knowing that it is disastrous and vain for official authority to attempt to modify prices. China has learned many lessons since the day when this author lived. The fifth

cause of the feebleness of the Government in regard to the control of the money market is the fact that bank notes and bills of exchange are issued by private capitalists.

Our author's advice to the Government was to make a law prohibiting the use of silver in money payments and at the same time restore the issue of Government bank notes which had been so long discontinued. In his opinion this was the only policy by which the five evils from which the Government suffered could be eradicated and the country made prosperous. In support of this view he appeals to the history of money in China. Ancient statesmen saw the propriety of drawing a revenue of cereal products from one locality, of textile fabrics from another, and of coined money from a third. They did not see the need of a large issue of coins, except occasionally when floods and drought compelled the adoption of this expedient. Nor did finance ministers in very early times limit money to silver or to copper. Pearls and jade, tortoise-shell and cowries, bundles of silk and grass-cloth, served as money in China's ancient markets. About 800 B. C. an old poem says: "A simple-looking lad, you were carrying cloth to exchange it for silk." The official master of the market, says the comment, stamped the cloth for use in barter, and it was 2 inches in width and 16 inches long. The author adduces this as classical authority for an issue of Government bank notes. But as the poem mentions merely barter, and the explanatory remark is that of an author of 200 A. D., how can we know whether the market officer stamped the cloth or not? It may have been a simple case of barter. Whatever is meant it would scarcely be by stamping, for this mode of giving official validity was hardly in use so early. Why, for example, do we find that the cash of the Ch'in dynasty, 220 B. C., were issued without any inscription upon them? Books tell us that the Han dynasty monarchs were the first to direct characters to be inscribed upon their coins. This practice commenced about 200 B. C. and was never afterwards neglected. He refers to another example—that of painted squares of white deer skin, which in the reign of Han Wu-ti were used as money. They were priced at 400,000 cash each, and were presented to the Emperor by the high nobility or by his relatives at the daily audiences or at high festivals, after which they could pass into circulation for the amount mentioned. At that time there was also a silver coinage, the silver being mixed with tin as an alloy, on account of the whiteness of that metal. This alloy of tin was doubtless intended to prevent all attempts at melting the imperial coins. The melter could only lose by the act, and if it was not worth his while he would not place the coins in his melting-pot. This seems to be a clear historical instance of silver coinage lasting for a very short time. Neither the silver coins of Han Wu-ti nor the painted squares of white deer skin remained long in use; and the high value assigned to the deer skin would suggest that it was something like the million-pound bank note of Samuel Rogers, which he displayed in the chimney-piece of his breakfast parlor. It was more an object of admiration than of utility, in an age of luxury and gaudy show. As to the origin of paper currency in China, we must look to an age later than the Han dynasty."—Ibid., p. 171.

Ten reasons for a paper currency.

In the Ming dynasty, about 1600 A. D., when the board of revenue was desirous to return to the use of paper money, the governor of one of the provinces stated in a memorial what appeared to him to be the ten advantages of paper money. The first was that it could be manufactured at the capital of each province for use in that province. The second was that it could circulate widely. The third was that it could be carried with ease, being light. The fourth was that it could be readily kept in concealment. The fifth was that it was not liable to division like silver into different grades of purity. The sixth was that it did not need weighing, as was the case with silver, whenever it was used in a commercial transaction. The seventh advantage was that silversmiths could not clip it for their own nefarious profit. The eighth was that it was not exposed to the peering gaze of the thief's rapacity. The ninth was that if paper took the place of copper, and copper ceased to be used for making cash, there would be a saving in the cost of this metal to the Government, or the copper saved could be used in manufacturing arms for the troops. The tenth advantage would be that if paper were used instead of silver, the silver might be stored up by the Government.

Our author in citing these ten reasons for adopting a paper currency adds that the last two are defective. In adopting paper for the mercantile classes the copper coins would remain in use to meet the necessities of the common people. So also silver should continue to be used in making ornamental articles and headgear of various kinds. It would be a mistake to shut it up in the Government treasury and prevent its being accessible to silversmiths. There is a fallacy lying hidden in our author's reasoning. He thought that the authority of the Government was all that was essential to the successful establishment of a circulating medium, not reflecting that if paper were so employed there was need of a corresponding store of gold or silver in readiness to pay value for the notes if the people lost confidence in them and wished for their metallic equivalent. It did not strike him that the financial credit of the Government bank can be sustained only by payment in gold or silver to discontented holders of paper. He thought only of supplying the demand for ornaments and not of a run on the treasury. In fact, China is too large a country and the merchants as a body too powerful by their numbers for the Government to attempt successfully the prohibition of silver, nor can it refuse to allow the issue of paper money by private banks. The difficulty in establishing a national bank is found in the fact that the Government cannot take better care of the interests of the mercantile classes than each private capitalist can do for himself, and in the difference which exists in the commercial conditions of the various provinces.

In the ten reasons for adopting a paper currency, when it is suggested that each treasurer of a province should issue bank notes, it may well be asked, why not leave native banks in possession of this privilege, which is not only a benefit to themselves but to trade generally? It is certainly a great advantage to travelers that through the wide business connections of the Chinese bankers, bills of exchange may be bought in Shanghai and cashed in any of the provincial capitals of the empire. Both to native and foreigner this is an unquestioned benefit, and renders traveling tenfold easier than if the silver had to

be carried in the traveler's trunks. In the fifth and sixth reasons alleged for Government paper currency the Chinese writer touches upon two patent and unanswerable objections to the present system. The silver is weighed at each transaction, and it is circulated in varying states of purity. The scales at which silver is weighed differ in each locality and the traveler feels himself outwitted. His money becomes less at each new point in his journey, and a general feeling of dissatisfaction with the currency grows upon him on his return; however, he would naturally become more reconciled to the tyranny of the scales had he silver left to weigh, for when he arrived again at places of large trade, his sycee weighs as much in proportion to bulk as before. The scale differs to allow the money changers in towns of small trade to pay their expenses, and when this is understood the indignation of the traveler sinks somewhat. But there is a worse trouble than the variation in scales. It is the variations in the purity of the silver. It becomes alloyed in many ways and is reduced to purity only by re-melting. Blacksmiths melt the silver, and in all places of large trade there are assaying offices which certify the purity of silver for a small sum. Silver sent to Peking to represent taxes has cut into it by the treasurer of the province, the name of the arrondissement from which it comes, and of the blacksmith who melted it. Only silver of first purity is allowed to be sent to Peking. In this way the Government indirectly aids in rendering the silver which is in circulation as money much more pure than it would otherwise be, but the introduction of new silver into the money market is the work of merchants alone. Also the law does in a direct way by statute undertake to protect silver from the incessant efforts of the unprincipled, who for private profit in every possible way try to diminish its purity. But it is so hard to discover the evil-doer that statutes are promulgated in vain and the owner of the metal is in fact only protected by the shroff and the assaying office. When it is considered how much impure silver is in circulation there does seem strong reasons for a silver coinage. This would at once improve the standard and raise the average of purity. To reject the precious metals as currency because their purity is tampered with, in favor of paper, would be a mistake. The cure for the evil is to maintain the efficiency of the statutes which aim at the punishment of crimes against the currency. Mexican dollars are now much more uniform in value than sycee silver, and the convenience of a coin is so great that it is remarkable that the Chinese Government does not follow Japanese example and establish a mint.—Ibid., p. 203.

The history of paper currency.

The first attempt at paper currency in China of which any record remains was in 806 A. D., when bills of exchange were called "flying money." Merchants in the capital could by an ordinance then first made receive Government bills in return for the merchant's copper money. On arrival at any provincial capital they could receive from the provincial treasurer the amount stated on the bill. There was a return to this system, which was a sort of banking facility offered to the merchants by the Government, about the year 960 A. D. A bureau

was instituted in Kai-feng-fu, then the capital, for the transaction of this business.

In 1023 Szechuen was suffering from the iron cash coinage which the Government from scarcity of copper was forcing on the people there. The paper notes then put in circulation at Chêng-tu by the Government were meant as a relief. They were to be returned once in three years. The idea sprang up among the rich merchants and was accepted by the Government, and the merchants conducted the business. The limit of capital represented by the notes was 1,255,300 strings, a string being 1,000 copper cash. In 1150 A. D. the Golden Tartars had just conquered north China, and about this time they adopted a currency in paper, because they found copper scarce. Copper, silver, and gold have always been chiefly found in south China. A north China kingdom finds it convenient to use paper so far as possible, to prevent its being dependent on a southern neighbor. From this time forward, during a century of the Golden Tartars and another century of the Mongol domination, strenuous efforts were made to maintain a paper currency. Colonel Yule, Doctor Bushell, and others have printed facsimiles of the notes of these periods. They are found, for example, in Yule's Marco Polo and in the Journal of the Peking Oriental Society published this year. All the efforts of the Government did not secure the credit of the notes at par. On the contrary, they became depreciated to an extreme degree. This, however, did not prevent the Government of the Ming dynasty, which acquired the sovereignty in 1368 A. D., from continuing for a time paper currency, which was finally abandoned as silver flowed into the country through the foreign trade which brought to the southern ports a portion of the products of Mexican and Peruvian mines. It was American silver that gave the death blow to paper currency in China. The arrival of sufficient silver was the real relief which Chinese trade required. Notes were finally abolished about 1620 A. D. Thus the conquest made by silver over paper occupied about a century or a little more, from the commencement of the trade of the Spaniards and Portuguese with Canton.—Ibid., p. 292.

Silver in China.

The silver used in China as a circulating medium in her commerce has been increasing, in quantity especially, for four hundred years, and most rapidly of all during the present century. Each industrious Chinaman represents so much wealth by his labor—that is, so much silver, for silver has now for several centuries been the standard of money value in this country. The increase of population means an increase of wealth wherever there is scope for industry; and in localities where opportunity is wanting, it leads to emigration. At the beginning of the Ming dynasty, in the latter half of the fourteenth century, the public currency had fallen into a most unsatisfactory state through the Government not being able to maintain the credit of the paper notes then used. Yünnan was conquered, and it contained many silver mines, and these were worked to increase the quantity of silver then rapidly coming into use as a medium of exchange. We are told that in 1578 the Government received from Yünnan 13,764 taels in paper money, 944 piculs of grain, and 5,769 strings of shells. Two hundred years later the amount received in hemp, cloth, and silver amounted to

14,801 taels of this last metal. The strings of shells used as money had disappeared. The cumbersome grain tribute in heavy bags had become changed for silver. But hemp and cloth were still received by the Government tax collector because they could be exchanged for silver, and the expense of conveyance of these articles was not very great. Yet after a few more decades this mode of paying taxes will again be exchanged for silver, which in a country like China has proved to be the most economical form of tribute. The Government in these circumstances began to prize silver very highly. It keeps its value as an article in great request for ornamental work. It is cheaper to convey than other kinds of tribute. It is acceptable in trade, and the merchant is far more willing to part with his goods for silver than for paper money. Hence the Government made efforts to obtain more of it. They set criminals to work in the mines of Yünnan. This was in 1460; and they do not seem to have allowed Chinese employers of labor to manage mining operations. They considered it good policy to keep the mines in their own hands, and they ordered the high officers to report fully on any failure in the working or diminution in the yield of metal. Then in 1463 the works were suddenly ordered to be stopped, probably because of earthquakes, for a few years later, in 1511, the governor of Yünnan sent up a memorial advising that all the mines should be stopped, on account of fresh earthquakes; but they were opened again in 1514, notwithstanding other objections which were pressed at the time, such as the gathering of a rough-spirited population at the mines, and the neglect of agriculture in the province, leading to want of food to supply the needs of immigrants. At this very time American silver began to enter the country through foreign trade at Canton and Amoy. More silver was thus introduced and a real need supplied, for it enabled Government to abandon both the shell currency in the southwest and the paper currency everywhere, and the merchants were very glad to see the last of the Governments, (sic) and to have in their place this shining metal. Silver was now wanted by everyone, to keep in store or use in buying as he pleased.

The value of silver in copper cash has gone through great vicissitudes. It has been three thousand, and it has been one thousand per tael. In 1696 A. D., a tael of silver was worth 1,750 cash, and it is now, 1889 A. D., worth 1,380 in the Shanghai market. In the reign of Yung Cheng, about 1730 A. D., 36 taels of silver were paid for a month's maintenance to 21 workmen at cash foundries in Yünnan—that is to say, 1¾ ounces of silver would then support an able-bodied workman for a month. In 1555 the casting of cash in Yünnan was commenced, on account of copper being produced there in abundance. The disuse of paper made a new supply, both of silver and of copper cash, a necessity, and from that time forward both metals have been needed; and when the growth of population is remembered they must still continue to be required in increasing quantity. Two centuries ago the workman could live for 100 cash a day. Now more is required, because prices have risen and every one who carries on his shoulder his baskets of market produce from his little farm to the adjoining local center of merchandise expects more money for it than did his grandfather did. The old currency needs to be modified to meet the new conditions. Copper cash are not enough for the uses of common life. Silver is required to do what the cash, through gradual sinking in value can not

do. Two hundred cash are wanted to buy that amount of food and clothing for which in former times 100 would have been enough—that is to say, the man who goes to market to buy must carry with him twice as much weight in copper as his great-grandfather did. It is more convenient in these circumstances to have small silver coins, and this is our convenience in the West, or small notes issued by native banks and properly stamped and inscribed may be used, as they still are in Peking.

Yet small silver coins could not now in China take the place of copper cash. Copper must continue to rank in China as the most widely useful of all currencies, because of the disproportion in the expense of living in large cities and in country districts, and the wide differences in climate existing between the north and the south and between mountain and plain in so large a country as China. That coin is most adapted to China which has the most minute divisibility. A dollar which is now worth 3s. 3d. is divisible into a thousand separate coins composed of a mixture of copper and zinc. It suits the prices of marketable articles and the incomes of the people to retain this subdivison in current coins. Even silver is circulated in very small lumps as well as in large ones, and the small hand steelyard used in weighing it is subdivided into hundredths of an ounce. Such a steelyard is part of the kit of every traveler, as a check on the weighing of the money-shops.—Ibid., p. 534.

Copper cash.

The older books written by Chinese archeologists on the history of cash contain at the beginning examples of money professing to come down from the primitive ages. Some of them belong to Fuhi and others to Shennung. The foreign collector of cash ought to know if he has such coins in his cabinet that this immense antiquity is given to them by medieval mythmakers. The best modern numismatists do not recognize such a claim. Yet they appear in a book of so much authority as Hsi Ch'ing Ku Chien, compiled by an imperial commission and published 1749 A. D. Seven hundred years ago, when the capital was at Hangchow, the first complete book on Chinese coins was published. Since that time archeologists have been numerous, and a persistent effort has been made to collect newly-found coins. Builders of houses and walls, countrymen at work in the fields, restorers of bridges, and diggers of canals in any part of China from time to time meet with old cash which are added to the current coins in circulation or are sold or presented to local numismatists. There never has been a law against the use of old cash mixed with the new, nor has there been any official effort made to collect them, and in consequence it is an every day occurrence to meet with coins made a thousand years ago. The traveler in China does not know, unless he examines carefully, how many relics of distant centuries constantly pass through his hands or through those of his "faithful Achates."

The chief interest attaches to coins of a time anterior to the book-burning—211 B. C. That was the period when literature and the arts and sciences took a mighty spring upward. It was the time when great books were written, destined to be ever after preserved by a grateful nation as those precious heirlooms which a mad conqueror in his enmity against the sages failed to destroy. The coins of that time

are indicators of progress in commerce and the arts in various localities of northern China. We may consider it as proved that bronze castings and the manufacture of iron implements, as well as goldsmiths' and silversmiths' work, were well advanced long before Confucius. The history known as Kwo yü shows that this was the case in regard to work in bronze. But cash were cast before 524 B. C., for it is recorded in that year that larger coins than had been before made were then cast in Honan, on the banks of the Yellow, River by order of the Chow emperor. From the collections of the numismatists it appears that a square hole in the middle and a legend of two characters were in use as early as this in Chinese coins. Hwo was the word for "money," meaning that which is changed (hua) for something else. Pao, "valuable," was prefixed to it. But coins must have existed before this, and in the Han dynasty it was fully believed that Kiang Tai-kung, the chief minister of Wên Wang in the twelfth century before our era, introduced them in Shensi when in office and afterwards in Shantung when he retired to his principality. His special repute is for advancing commerce, and it was under his fostering care that the salt trade of northern Shantung came to exercise a decided influence on the development of internal commerce in ancient China. The history of Pankoo ascribes to Kiang Tai-kung the origin of round coins as distinguished from knives and pieces of cloth. We may adopt this view and may connect it with improvements in metallurgy and new acquisitions of foreign knowledge at the beginning of the Chou dynasty. If Kiang Tai-kung is rightly credited with the origination of round cash, the period of that improvement is then fixed to the twelfth century before our era. Yet it may be that he is credited with it because he promoted trade and was possessed of political sagacity shown in other useful measures. If at any time between the eleventh and fifth centuries before our era the coins called cash were introduced by any statesman in northern Shantung, whose name did not shine out with luster in history, it was very likely that the improvement would be attributed to Kiang Tai-kung. It would be by a suggestion from the strings of seashells then used as money that the idea of a hole for stringing the new copper coins would be most probably derived. Further it would be before the time of Kwan Chung, the great administrative statesman of the seventh century, for in the book purporting to be written by Kwan Chung, there are several references to the coining of cash, but the compiler does not attribute the invention to Kwan Chung himself. Perhaps in these circumstances it may be best to assign the first round metal coinage to about the ninth century, the age of Siuen Wang, when the country was prosperous and wars were conducted successfully. But this may be too late, and there is really no very strong reason based in the old literature of China why to Kiang Tai-kung the honor of introducing a copper currency should not be assigned. The remarkable old work Chowli, in describing the administration through all its departments, mentions among them a cash office for the manufacture and issue of cash. But this book was probably small at first, and its bulk increased from one period to another, and this particular statement may have been inserted, we know not when, by some unknown official. We must wait for more discoveries from underground. The railway from Peking to Hankow will in Chihli and Honan proceed through a country occupied by a people who for four thousand years at least have ploughed and sown the land, carried the

produce to market, exchanged it for something necessary for use or ornament, and returned to their homes with their new possessions. The railway works may anywhere in that region, "rich with the spoils of time," yield interesing treasures which will throw light on the past. Should there be a line made from the city of Confucius, or from Taishan to the north of it, to Tientsin, it would bisect the very territory which belonged as a feudal fief to the traditional founder of the copper currency of China. As about many other ancient matters, so on the question of the origin of this currency, our successors will know with certainty what now can not be determined.—Ibid., p. 745.

3. MONEY SYSTEM OF MANCHURIA.

(*a*) Report from the American Consul at Niuchwang.

[From Daily Consular Reports, No. 2010, July 22, 1904.]

The following paper on money in Manchuria, prepared by Mr. Arthur Henckendorff, of the Russo-Chinese Bank at Niuchwang, was transmitted by the United States consul at that place under date of May 5, 1904:

I think it would not be possible to find a more intricate or complicated money system than that at present in vogue in Manchuria. This is owing, I should say, to the fact that they have not there a fixed recognized standard of silver which can be taken as a basis for exchange operations.

Although China's currency is on a silver basis, yet there is no standard of silver common to all their provinces.

For instance, the silver of Niuchwang has a touch of 99.2—or, in other words, 8 ounces of alloy to 992 ounces of pure silver. The touch of the silver of Liaoyang, Mukden, Kirin, and Tieling is supposed to be the same as that of Yingkou, but it never is, Yingkou silver usually being finer by 1 or 2 ounces in the thousand. Kwangchingtsu silver has a touch of 99, which puts it below Yingkou silver, while, on the other hand, Harbin silver has a touch of 99.8, which puts it above that of Niuchwang. When we think that the touch is only one of the items which has to be taken into consideration in the everyday exchange operations which take place between the various Manchurian towns, we can understand that the negotiating of a rate between Chinese currency is not a simple matter. This constant practice in exchange of the Chinese banker accounts, I should say, for much of his quickness of perception.

The hard-coin currency in Manchuria consists of the sycee, small coin, and, of late, the ruble; yet the bulk of the merchandise bought and sold is not bought or sold against these hard effectives. All prices and rates quoted are against transfer money or mo-lu yingtzu—in other words, goods money, or huo yingtzu. This transfer or mo-lu yingtzu is a peculiar and muddled system. The arrival of the ruble and the establishment of quick communication with Manchuria, thus enabling the rapid transportation of treasure to and from Manchuria, is in large part responsible for the muddling.

The transfer money is a purely nominal currency not substantiated in any way by an effective—in other words, it is a credit. We will say, for instance, that a merchant starts business in Niuchwang and

that his capital is deposited in some bank in Shanghai. The first thing he will do will be to sell his draft on Shanghai in the market at the market rate. The purchaser will transfer to the credit of the merchant, at the place where he banks, the equivalent, in transfer money, of his draft, and with this credit he can purchase his goods or do his banking. This transfer money can at any time be sold for silver or ruble effectives.

The Chinese year has four settling days, or mao-kou, when all transfer money which has been issued has to be released. The method of redeeming transfer money has undergone several changes during the last few years. The first system was that transfer money should be redeemed at full value in hard silver at the end of every three months. This system was continued until about two years after the Japanese war. During this period the effective currency was sycee and copper cash, small coin not having then made its appearance in large amounts.

Tiao notes were largely issued by bankers and merchants of good standing. Silver at that time was only purchasable with cash, not, as now, with transfer money. All other exchange quotations between Yingkou and the other provinces were in transfer. At this time hard sycee was subject to a premium of from 50 cents to 1 tael per shoe of taels, or, roughly, about 2 per cent—that is to say, 53.50 hard sycee taels were equivalent to 54 or 54.50 transfer taels. On the settling day, when the holder of transfer was paid full value in sycee—that is to say, in sycee at par with transfer—he actually received about 2 per cent more than the original amount; this 2 per cent represented the interest he received on his money. By this it may be seen that transfer money increased in value as it approached the settling day, owing to the fact that it was accruing interest.

After the Japanese war the Chinese Government started to mint dollars in the various provinces; this had the effect of raising the price of silver and causing a scarcity in the silver market, as the Government was buying large quantities. This scarcity of silver made it very inconvenient to have to settle up in ready silver, as the market was often very tight, and consequently the premium on silver would go up very high, thus causing a heavy loss to issuers of transfer; so it was arranged that transfer upon falling due should not be redeemed at par in silver, but should have a premium added to it. This premium was usually slightly smaller than the premium on sycee, and represented the accrued interest. This system had the effect of somewhat diminishing the demand for hard sycee.

During the Boxer trouble the transfer issued was not settled up for a period of nine months. The next settling day it was settled up by the issuers of transfer paying $81.50 for each shoe of transfer, the shoe then being worth about $79, the difference between these amounts standing for the interest. Since then settlements have been made both by paying small coin and by paying a premium.

I mentioned a little while ago that before the Japanese war there were tiao notes and copper cash in currency. These gradually disappeared after the appearance of the small-coin dollar, so that now even in the stalls in the streets you will hardly hear the word tiao mentioned, all business being done in small coin.

Of late the ruble has been a very important factor in the Manchurian currency. The ruble was brought into circulation by the

Russian railway and the troops. The Chinese took to it readily, owing to the ease with which it could be carried backward and forward, thus saving the expense of shipping specie.

The currency of Laioyang is slightly different from that of Niuchwang. The effectives there are the small coin, sycee, copper cash, and rubles. They have there also a system very much like the transfer of Niuchwang—that is, the tieh yingtzu, or note money. This consists of tiao notes issued on demand by bankers and merchants of good standing, payable upon presentation, not in copper cash, as would be expected, but in small coin, at the rate of the day. (The present exchange is about 11 tiaos to the dollar; the tiao there is the same as the tiao here—that is, 160 cash.) The present rate is about 15 tiaos to the tael. This quotation stands good merely for transfers of the tael and tiao against goods bought or sold; if ready silver is required, an extra premium of about 1 tiao, more or less, according to the market quotation, must be paid. For instance, if a person buys 100 pieces of goods the price of which is 1 tael apiece, and the market rate is 15 tiaos to the tael, he would have to pay 1,500 tiaos for these 100 pieces of goods; but if, on the other hand, he wants to buy 100 taels of hard sycee, he will have to pay 1,600 tiaos—that is, 1,500 tiaos plus the premium of 1 tiao (or whatever the market rate may be) on each tael—thus making it 100 tiaos more.

The money system of Moukden and Tieling is practically the same as that of Liaoyang.

The system in Kwangchingtsu and Kirin is quite different again. There they have a system of transfer money very much like the system in Niuchwang. The exchange there is chiefly between tiaos and silver. The tiao there is three times the value of the Yingkou, Liaoyang, and Tieling tiao. It is valued at 480 copper cash. But in Kwangchingtsu and Kirin there is no cash to speak of, nor are many tiao notes issued, so that the tiao is more or less a nominal currency used merely for business transfers, the actual settlements being made in sycee according to the rates quoted in the market.

The price of rubles is quoted in tiaos. The ruble has a fixed rate of 2 tiaos. The difference in rise or fall in exchange is made up by a premium on the ruble, which rises and falls as the value of the silver increases or decreases. In Chi-chi-har and Harbin all business is done in hard effectives, either sycee, rubles, or small coin.

(b) The Defeat of the Traveling Ruble.

As an instructive and illuminating comment on the Chinese system are added the following extracts from a chapter of Mr. B. L. Putnam Weale's book, Manchu and Muscovite, under the above title:

So by 1901 the ruble had a very firm and enviable position and bid fair to become master of the economical situation in Manchuria. The Chinese Eastern Railway, which was being rebuilt at a truly phenomenal rate, now jumped into the fray, and arbitrarily and without any right to do so decreed that henceforth passenger tickets and freight charges must be paid for in ruble notes without distinction. Up till then, you see, the Harbin Railway administration had not felt sufficiently strong to tackle the Chinese on what is a matter of life and death to everyone of them as soon as they are old enough to walk—that is, on the dollar question. But the presence of large bodies of

occupation troops made the Slav foolishly confident, and caused him to commit a first great faux-pas, which was to be the ruin of the ruble. Tell a Chinaman he has got to do something that you have neither the organization nor the power to make him do and you are simply inviting disaster. Above all, when it is a question of the Chinaman's pocket, act most warily and be warned in time.

Here it is necessary to explain that the real currency of Manchuria, as in other parts of China, is merely copper cash, not the small copper cash of the central and southern provinces, but the so-called large cash of the north. As these cash are too small a denomination in which to conduct commercial transactions of any magnitude, it may be said that the "tiao" is the unit of value in the big market places. What is the tiao? The tiao is simply a certain number of copper cash. In north China, or say the metropolitan province of Chihli, it is 100 large cash; in Niuchwang it is 160; in Moukden more, and finally in Kirin several hundred cash go to the tiao, and, roughly, in this last named place, 2 tiao equal 1 provincial dollar. But there is another point to note. The tiao is an imaginary coin; in fact, it is no coin at all. It is simply a multiple of copper cash settled on long ago in the dim past and varying according to the district in which you happen to be, and is not coined into silver pieces. To simplify matters, Chinese bankers in Moukden, Kirin, and in fact in every mart of importance, issue paper tiao notes of various denominations, and these notes correspond almost exactly to the country bank notes of European countries.

These notes are, therefore, only negotiable in their districts of issue. If, for instance, I have got 1,000 tiao in Moukden notes, say £20, and I propose to go into Kirin city to buy produce, I must first cash my notes in Moukden and get a Kirin credit in silver taels; that is, an order on a Kirin bank to pay me so many local taels' weight of silver on demand. Arrived in Kirin, I present my draft and am told that my credit in Kirin tiao at the current rate of the day is so and so and so much.

Are you beginning to see what a hornet's nest the Russians were disturbing when they attempted, unauthorizedly, to tamper with the Chinaman's birthright, the exchange question and the vast profits it brings him? However, there is yet another point.

In 1897, I think it was, mints to coin dollars of the same nominal weight and fineness as the Mexican dollars were opened in Kirin city and in Moukden. Unfortunately no figures are available to show what number of coins were yearly placed on the markets, but there is some reason to suppose, although the work was very intermittent, that the totals ran into millions. More attention, however, was given to the minting of subsidiary coins—that is, 5, 10, 20, and 50 cent pieces—than to dollars, because adulteration and short weight are not so easily detected or so objected to in minor coins as they are in big ones, and the mint profits are, therefore, more secure. These mints were opened with one object, that of supplying convenient tokens for the ever-growing minor trade and traffic between foreigners and Chinese in Manchuria.

Reviewing rapidly what has been written above, the reader will see at once that the real money of Manchuria is the larger copper cash; that for commercial transactions the tiao, a certain multiple of copper cash, is the value used; that for petty dealings of a semiforeign char-

acter minted dollars are locally employed, and that, finally, for settling adverse trade balances, silver bullion or sycee is shipped from one point to another. The ruble was, therefore, in every way an interloper, at first tolerated by the Chinese bankers because they could squeeze a beloved exchange profit out of it, whether they were buying or selling. Once, however, they saw their entire monetary system threatened by the arbitrary decrees of Russian bureaucrats they prepared for battle, and when the dollar-loving Chinaman prepares for battle, look out for squalls.

During the first part of 1901 nothing much was noticeable, but after the evacuation protocol of April, 1902, was signed in Peking ominous rumors became suddenly current in every tea house and hong in Manchuria. The Russians were going, everybody said, and were leaving their useless paper money behind in millions of innocent Chinese hands. Who guaranteed this paper? What was this paper, and was there no redress?

These were the questions that were being freely asked and nervously answered, and the Chinese bankers, the conscious instigators of false rumors untraceable to anyone, smiled quietly in their back parlors, knowing that they would succeed. Briefly put, the battle, although just commenced, was already won. Distrust and suspicion, those twin fiends that conquer the strongest, had taken hold of the multitudes, and the game was absolutely in the hands of 1,000 native banking people. For although the Russian did not probably in the first instance dream of forcing his paper money onto Manchuria, events so shaped themselves that he thought he could use the ruble as a powerful weapon of conquest. Manchuria had a Russian railway; Russian guards everywhere; Russo-Chinese banks in many important towns; Russian authorities controlling the seaports; in fact, it seemed like Russia herself to purblind employees who traveled up and down the empire of the 5-foot track. Therefore, why not make an end of all pretense at once and spread the famous paper money, of which there is apparently no end, stamped with the effigy of an omnipotent Czar, and symbolic of Russia's victory all over the country?

But, as I have already said, it is best not to go too far in a country the size of France and Germany rolled into one, and withal possessed of a population to whom money is as the breath of life. Two years or even one year ago tens of millions of ruble notes were hoarded in every native bank in Manchuria; to-day who will find me 1,000,000?

A year ago the Harbin Railway administration addressed a query to St. Petersburg as to what should be done with the millions of silver dollars and hundreds of millions of copper cash stored in the railway city, and representing railway receipts during pre-Boxer days. The answer promptly came: Ship away the dollars and keep the copper cash pending further instructions.

So the dollars were duly sent away. One million or so came to Shanghai, were sold on the local market only to be promptly bought up by native houses from the north that have Shanghai branches, and shipped back to Moukden and Newchwang inside of a fortnight. Some of the dollars went to Tientsin and were back within forty-eight hours in Manchuria. The Russian was vainly attempting in a most puerile fashion to kill the minted dollar in Manchuria; which, after all, is itself something of an intruder in the country. If such small success attended the fight against a semi-foreign coin, what were the

chances against the elusive and imaginary tael, the still more fictitious tiao, and the very matter-of-fact copper cash? Absolutely nil, of course.

So to-day we find a conservative English banker estimating that nearly 70,000,000 paper rubles are exported to Shanghai from Manchuria by Chinese merchants and changed into silver dollars or silver credits; native bankers stating that more than this amount goes to Tientsin and Chefoo, carried there by Chinese hands and once more promptly cashed into beloved silver. What does all this mean? That the ruble is entirely discredited by astute Chinese, and that whether the Russo-Chinese bank in Manchuria makes its payments in paper or not is a matter of entire indifference; for no sooner is paper received than prompt measures are taken to cash it into something more finite than a mere piece of parchment bearing an excellent likeness of his Imperial Majesty the Czar.

And with this huge drain going on every Russian enterprise is being rapidly crippled. Harbin, to take one instance only, has spent all its money, and, what is more, all its credit in building itself new houses capable of more effectively resisting the terrible winter. The Chinaman is the only man who has profited by this, for, although the houses are nearly all ready, there is no one with money enough to live in them, so slack has business become. The rubles have all disappeared and been hidden in the coffers of the Russo-Chinese bank, alone able, among a host of would-be empire builders, to purchase back in silver what has been emitted in paper. In both Port Arthur and Dalny it is the same story. Tight money, or no money at all, are the cries one everywhere hears. Where have all those fabulous tons of paper rubles disappeared to? Where, indeed?

So the real commercial life of Manchuria rolls on uninterruptedly in spite of the Russian invasion, in spite of imperial decrees, in spite of every attempt. Chink, chink, go the silver dollars; chunk, chunk, the heavy sycee of pure silver; clank, clank, the iron and copper cash of a people who understand business, and these sounds are full of ominous meaning for the incautious Slav. The railway, it is true, must still be paid for in rubles, but then in no country in the world is the native such an adept at exchange banking as in the land of the blue gown. If you want 100 rubles, or even 10,000, you can buy them almost anywhere in Manchuria, for Chinese dealers are quite ready to make a profit, and the soldiery are being daily fleeced of more millions. But, though you purchase rubles with ease, you are simply buying a foreign currency which has no more entered into the commercial life of the people than the golden sovereign has at Hongkong. And then in Hongkong England has at least some trade, which is more than can be said of the Russian in Manchuria.

The fact is, the Chinaman is inordinately a lover of the tangible. He likes his money in solid coins or solid bullion, even if they are all debased or fallen in value; that is, something he can handle and that is intelligible to the merest child. It is true that he may conduct huge transactions in mere credits, but in every case he knows that differences and balances are going to be settled in solid bullion payments. The ruble, therefore, has had its fling, and after a half-hearted attempt to oust the Manchurian currencies, it is condemned like everything else Russian in Manchuria to the dreary existence of a railway life.

A year ago in Moukden you could put down your paper money anywhere unchallenged. To-day bring out a 50-ruble note and your bland Chinaman asks you to be good enough to wait a minute while he runs and changes. It is true that the wily Jap has somewhat contributed to this unkindly suspicion, for quite unauthorizedly he took upon himself to make up for the tightness in the northern markets by opening private ruble factories in Osaka, and flooding the place with truly excellent likenesses of the great Czar's money. But apart from this, the local Chinese have been asking, with all the rest of the world, how long this enormous Manchurian expenditure, which has made them richer than they ever were before, can go on without bringing an almighty crash; and they are quite right to ask the question. Russia must have spent 500,000,000 or 600,000,000 rubles if she has spent 100 in Manchuria during the past few years, and most of this has gone into Chinese pockets. The Chinaman has surely had his revenge in the sweetest way possible for the brutalities of 1900, by killing the ruble and pocketing the change. The political crisis may be settled one way of the other, but it can have no influence on one thing—the fate of the ruble. The ruble is already defeated and paid for. The Chinese have triumphed with a cash victory in spite of a material defeat. Russia may pin down Manchuria with her bayonets, but the Chinaman has his hands in the pockets of the Ruski soldiery and civilianry, and will starve them all to death when he likes.

Appendix B.

THE PHILIPPINE ISLANDS.

1. EXTRACT REGARDING CURRENCY FROM REPORT OF THE SECRETARY OF FINANCE AND JUSTICE.

The evils resulting from the rapid fluctuations in the value of the Mexican silver dollars and Spanish-Filipino currency in the islands were fully set forth in the last annual report from this office. It was there stated that between January 1, 1902, and October 25, 1902, the insular government had sustained an aggregate loss of \$956,750.37½, measured in gold dollars, by reason of shrinkage in the value of the silver in the treasury. That loss still continued to increase by the successive changes in the official ratio between local currency and gold until the aggregate loss reached the sum of \$1,615,562.38 on June 30, 1903. During the latter portion of the fiscal year 1903, however, the official ratio had been made such that large sums of United States money had been paid into the treasury instead of local currency, so that the amount of local currency steadily diminished and of United States money steadily increased.

The value of silver in the markets of the world commenced to rise in February, 1903, and has continued to rise, with more or less fluctuations, down to near the 1st of November, 1903, the date of this report. But the amount of local currency remaining in the treasury during the period of the rise in price of silver was so small, compared with what it had been during the period of depreciation in the price of silver, that but a very small portion of the losses caused by the depreciation was recouped.

During the period last referred to there was another source of loss to the treasury in the fluctuating currency. The official ratio between the two currencies was maintained at such a rate that very little Mexican or local currency came into the treasury in payment of public dues, it being more profitable to pay in United States money than in local currency; but as the assets of the government were largely in local currency, it necessarily made its payments in local currency, and at the official ratio. This resulted in a materially larger number of Mexican dollars being paid out to satisfy the government's current liabilities than would have been paid out had the official ratio and the commercial ratio been the same. From this source there was a large loss to the treasury.

The following are the ratios in effect during the fiscal year 1903 between Mexican or local currency and money of the United States:

From July 1 to 7, 1902, the ratio existing was $2.27 Mexican currency for $1 of money of the United States; July 7 to September 23, 2.35 to 1; September 23 to October 26, 2.40 to 1; October 26 to November 12, 2.46 to 1; November 12 to November 23, 2.50 to 1; November 23 to January 25, 1903, 2.60 to 1; January 25 to March 11, 2.66 to 1; March 11 to April 4, 2.60 to 1; April 4 to May 1, 2.55 to 1; May 1 to May 14, 2.50 to 1; May 14 to June 30, 1903, 2.45 to 1.

To meet the manifest and universally acknowledged hardships of an unstable currency, disastrous alike to all business interests and to the government, the Congress of the United States on the 2d day of March, 1903, passed an act entitled "An act to establish a standard of value and to provide for a coinage system in the Philippine Islands," whereby a system of a new currency was authorized by Congress, substantially in accordance with the recommendations made by the Commission in each of its three reports. The beneficial effect of the new legislation by Congress was immediately felt in business circles. While it was impossible for the new system to be put into immediate operation, yet the fact that such a system was to be in force in a short time restored confidence to business men to a very large degree, and enabled the government to make its forecast of income and expense with more certainty. The beneficial and steadying effects of the new law were felt almost from the moment of its approval by the President of the United States. Arrangements were immediately made, through the Bureau of Insular Affairs at Washington, for the purchase of silver and other metals for the new coinage, and for the coinage of the same at the mints of the United States, and for the preparation of the silver certificates authorized by the act of Congress referred to, through the Bureau of Engraving and Printing at Washington. The designs which were accepted for the new coins were made by Señor Melecio Figueroa, a Filipino, and are very attractive.

The purchases of silver for the new coinage undoubtedly contributed to the increase in the market value of silver, though other causes operated to produce that result. The price of silver steadily advanced from 49.1 cents per ounce in New York on March 26, 1903, when the insular government commenced to purchase, to 59.5 cents per ounce on or about November 1, 1903, when the government ceased such purchases, it being then considered that the amount already coined and to be coined from silver and other metals purchased down to that date, coupled with the Spanish-Filipino coins and United States money in circulation in the islands, would furnish a sufficient circulating medium for all the demands of business until the commerce of the islands should increase. Down to November 1, 1903, 11,707,005 ounces of silver had been purchased for the new coinage, at a cost of $6,317,460.63, averaging 54.108 cents per ounce. Metals for minor coins had been purchased at a cost of $86,042.01. From the metals so purchased there had been coined and shipped to Manila down to November 1, 1903, 14,500,000 Philippine pesos, half-pesos to the value of 1,550,000 pesos, 20-centavo pieces to the value of 1,070,000 pesos, 10-centavo pieces to the value of 510,000 pesos, 5-centavo pieces to the value of 362,500 pesos, 1-centavo pieces to the value of 79,200 pesos, and half-

centavo pieces to the value of 54,550 pesos. Of the currency so coined, 14,543,650 pesos in all, including subsidiary and minor coins, had been received in Manila up to and including October 31. On October 31 there were likewise in transit to Manila 1,560,000 in pesos, 1,000,000 in half-pesos, 500,000 in 20-centavo pieces, 60,000 in 10-centavo pieces, 70,000 in 5-centavo pieces, 20,800 in 1-centavo pieces, 16,800 in half-centavo pieces, making an aggregate of 3,227,600 pesos in transit. This makes a total of 17,771,250 pesos in value of Philippines currency received and in transit on October 31. A large portion of the minor coins so received have been stored in the insular treasury, but deposits have likewise been made in the local banks that are legal government depositories and have by them been placed in circulation to a greater or less extent. The insular government has likewise, since the 1st of August, 1903, distributed the Philippine pesos in payment of all its civil employees, and in payment of its other obligations so far as practicable.

Early in the inauguration of the new system a question of great practical importance arose as to what should be done with the Mexican and Spanish-Filipino coins in the islands. Strong pressure was brought to bear by the local banks and other dealers in currency to induce the Commission to enact a law to prohibit the further importation of Mexican dollars, or impose a heavy tax upon such importation, and agreeing to take up or redeem all the Mexican currency in the islands at a fixed valuation. It was urged that the government under those circumstances might well redeem all the existing local currency, both Mexican and Spanish-Filipino, at a uniform ratio of 1 peso of the new currency for 1 peso of the old. The result of such action would necessarily have been to have given an immediate fictitious value to the local currency then in the islands, and to have enabled the banks and others who might get possession of it to obtain a much larger price than its true and actual value. The result likewise would have been to have imposed upon the government a great expense by reason of paying a fictitious value for the local currency in the islands, probably largely in excess of the whole profits that may be made from seigniorage on the new coins. It was also probable that the demonitization of the Mexican coins would tend of itself rapidly to expel them from the islands, and that the danger of their importation was not then imminent. After careful consideration it was determined that the ordinary laws of supply and demand should be allowed to have full sway, for the present at least, and that the Mexican dollars should be allowed to flow wherever the current naturally tended to take them, and that the government should not redeem them or any part of them at any time or at any price.

The result so far has demonstrated the wisdom of this conclusion. For some time before the inauguration of the new system the fact that it was to be inaugurated, in connection with other large causes, has tended to produce a constantly accelerated flow of Mexican dollars out of the islands. From January 1, 1903, down to March 1, 1903, and before the act of Congress had passed, the exportation of Mexican dollars amounted to approximately 1,600,000 pesos, and the importation of them to approximately 1,200,000 pesos. From that date down to the 1st day of August; when the new currency began to be put into circulation, the exports of Mexican dollars

amounted to approximately 11,400,000 pesos, and the imports to approximately 251,000 pesos. From the 1st day of August to the 1st day of November, 1903, the export of Mexican dollars amounted to 4,766,900 pesos, and the imports to 774,707 pesos, including a small amount of Spanish-Filipino money. The importations and exportations of Mexican dollars from the 1st day of January, 1903, to the 1st day of November, 1903, aggregated approximately 17,767,000 and 2,226,000, respectively, leaving a net excess of exports over imports amounting to approximately 15,541,000, which is approximately the amount of the new coinage that has been introduced into the islands. So that the currency available in the islands has not been at all diminished by reason of the export of Mexican.

It is impossible to estimate with any exactness the number of Mexican dollars still left in the islands. Mr. Jones, manager of the Hongkong and Shanghai Banking Corporation at Manila, estimates that not more than 4,000,000 pesos Mexican are still remaining in the islands. Other estimates are much higher. The amount of such coins in all the banks and in the insular treasury on the 1st day of October, 1903, was much less than 1,000,000 pesos. There was no record of the amount of such coins in the islands at any time; nearly all of them were introduced in violation of Spanish law, and, therefore, necessarily no record was made thereof. The Mexican dollars were the coinage of a foreign country, in part unlawfully introduced into the islands, and the insular government manifestly owes no duty in regard to them. Other considerations pertain to the Spanish-Filipino coins. They were issued by authority of the Government that controlled the Philippine Islands, and are in the hands of the residents of these islands. They are not used in Asiatic countries, so that it is impracticable to export them to those countries, as is done with the Mexican dollars. It was considered that good faith and fair dealing required that the insular government should on some just basis redeem the Spanish-Filipino coins, and it is proposed to take such action at an early date upon a basis to be hereafter determined. This basis, however, will not be in excess of the commercial value of Mexican dollars, and after a reasonable time will probably be the bullion value of the coins. The Spanish-Filipino coins that are in the insular treasury are already being transported to San Francisco to be coined into new Philippine coins in the mint there located. The official ratio between United States money and local coins, both Mexican and Spanish-Filipino, for payment of public dues has been maintained at $1 of United States money for $2.30 of the local coins since August 1 to November 1, 1903. This ratio was an artificial one, and gives to the local currency materially less than its commercial value.

The result has been that very little of it has been paid into the treasury for payment of public dues during that period. On the 23d day of October, 1903, the civil governor issued a proclamation, in accordance with the act of Congress of March 2, 1903, providing that Mexican dollars would not be received for public dues after the 1st day of January, 1904. After that date another date will doubtless be fixed after which the Spanish-Filipino coins will not be received in payment of public dues; but between the date of January 1, 1904, and the date when Spanish-Filipino coins become demonetized the ratio between United States money and the Spanish-

Filipino coins for payment of public dues ought to be a fair commercial ratio, so that such coins will come into the treasury in payment of public dues, and upon coming in they ought to be there retained and shipped, from time to time, to San Francisco to be recoined into the new Philippine coins. During the same period provision ought also to be made for their redemption by the treasurer at the official ratio, irrespective of whether they are or are not tendered in payment of public dues. It will require considerable time to get in the Spanish-Filipino coins, the amount of which is estimated at between 11,000,000 and 15,000,000 pesos, to expel the Mexican pesos, and to introduce the new Philippine coins throughout the remote provinces. The number of Philippine pesos, subsidiary and minor coins, deposited in the banks and by them put into circulation, and put into circulation by payment directly from the treasury for salaries, wages, and other obligations of the government, is as follows, prior to the 1st day of November, 1903:

On October 31 there were held in the vaults of the treasury 9,517,004.22 pesos, and in circulation 5,026,645.78 pesos, of which last amount 3,246,473.50 pesos consisted of money held in the vaults of the four principal banks of Manila. The aggregate of these two items—9,517,004.22 and 5,026,645.78—is 14,543,650 pesos, the total number at that time received in the islands.

In accordance with the provisions of said act of Congress, steps were immediately taken to secure the printing of the new silver certificates, such certificates, lacking only the seal and numeral, having been received in the islands up to and including October 30 to the amount of 5,000,000 Philippine pesos. The work of printing the numerals and seals upon them was immediately begun under the direction of the treasurer, and their disbursement, in exchange for silver pesos deposited in the treasury, commenced on the 28th day of October, 1903. From that date and during the first week in November about 400,000 of them were placed in circulation. They form an exceedingly convenient means of exchange and relieve the burdensomeness of making payments in the heavy silver coin, either old or new, and come as a great relief for business men and all others who have occasion to receive or pay out money.

The act of Congress above referred to, and likewise the act of Congress approved July 1, 1902, entitled "An act temporarily to provide for the administration of the affairs of civil government in the Philippine Islands, and for other purposes," provided in general terms the safeguards that might be employed to make certain the maintenance of the parity of the Philippine peso with gold. To put those provisions of the act of Congress into effect, and to supply such other means as were deemed necessary for maintaining the parity between the new currency and gold, and to supply the necessary machinery for issuing and safeguarding the issuing of silver certificates, the Commission on the 10th day of October, 1903, passed Act No. 938, entitled "An act constituting a gold-standard fund in the insular treasury, to be used for the purpose of maintaining the parity of the silver Philippine peso with the gold-standard peso, and organizing a division of the currency in the bureau of the insular treasury through which such fund shall be maintained, expenditures made therefrom, and accretions made thereto, and providing regulations

for the exchange of currencies and for the issue and redemption of silver certificates," which, for brevity in this report, is termed the "Gold standard act."

That act provides for the creation of a "gold-standard fund," to be used for the purpose of maintaining the parity of the silver Philippine peso with the gold-standard peso provided in the act of Congress approved March 2, 1903. It states that all funds in the insular treasury which are the proceeds of the certificates of indebtedness issued under said act of Congress, all profits of seigniorage made in the purchase of bullion and coinage therefrom, all profits from the sale of exchange by the insular government between the Philippine Islands and the United States, and all other receipts in the insular treasury accruing from the exercise of its functions of furnishing a convenient currency for the islands shall constitute a separate and trust fund. It can not be used to pay any of the expenses of the insular government, except those connected with the purchase of bullion and the coinage of the same, those which are incident to the transportation of such money to the Philippine Islands from the place of coinage, putting of the money into circulation, including the preparation and issue of the silver certificates, and the carrying out of such financial transactions as may be authorized by law to maintain the circulation of the new currency and for the maintenance of the parity of value between the silver Philippine peso and the subsidiary and minor coins with gold, with the proviso that there may be withdrawn from the gold-standard fund such amount as the Philippine government may deem proper to pay the principal and interest of the certificates, or any part of its indebtedness incurred under section 6 of the act of Congress of March 2, 1903. There is created in the bureau of the insular treasury a division of currency, the chief of the division to be appointed by the civil governor, with the advice and consent of the Commission, at an annual salary of 6,000 pesos Philippines currency. It is made the duty of the chief of the division of currency to examine the books of the treasurer and auditor, to make report of the funds in the treasury which are to constitute the gold-standard fund and to be segregated as such, and to make his report thereof to the treasurer.

If the treasurer and auditor concur in the recommendations so made, a segregation shall be made in accordance with that report on the books of the treasurer and auditor. In case of any difference of opinion between the chief of the division of currency, the treasurer, and the auditor, the method of segregation is to be finally determined by the secretary of finance and justice. After the segregation has been effected all receipts for moneys coming into the treasury that ought to be deposited to the gold-standard fund shall be submitted to the chief of the division of currency for his initialing and proper notation of the same. When any money is to be withdrawn from the gold-standard fund, or transferred from the treasury in Manila to a depositary elsewhere, or vice versa, the warrant or draft or telegraphic transfer of the same must state specifically that it is from the gold-standard fund, and shall be initialed and noted by the chief of the division of currency. No transaction in the treasury with reference to the coinage of money, the circulation, the maintenance, and preservation of the gold-standard fund, the maintenance of the parity, or the issue or retirement of silver certificates shall take place until

first submitted to the chief of the division of currency. It is made his duty to keep a set of books dealing solely with the financial operations of the government in coinage and currency matters and in the administration of the gold-standard fund, and to make a monthly statement of the same to the insular treasurer and to the secretary of finance and justice. But the actual custody and control of all insular funds, including the gold-standard fund, remains in the insular treasurer, as heretofore, and he is responsible for the same; the duties of the chief of the division of currency to be performed under his supervision.

For the purpose of maintaining the parity of the Philippine silver peso with the Philippine gold peso, which latter is the theoretical standard, under the act of Congress referred to, and of keeping the currency equal in volume only to the demands of trade, five special provisions are made. The treasurer is authorized—

First. To exchange at the insular treasury for Philippines currency offered in sums of not less than 10,000 pesos, or United States money offered in sums of not less than $5,000, drafts on the gold-standard fund deposited in the United States or elsewhere, charging a premium of three-fourths of 1 per cent for demand drafts and 1⅛ per cent for telegraphic transfers, and to direct the depositaries of the funds of the Philippine government in the United States to sell upon the same terms and in like amount exchange against the gold-standard fund in the Philippine Islands. The premium to be charged for drafts and telegraphic transfers may be temporarily increased or decreased by orders of the secretary of finance and justice, should the conditions at any time existing, in his judgment, require such action.

Second. To exchange at par, on the approval of the secretary of finance and justice, United States paper currency of all kinds for Philippines currency, and the reverse.

Third. On like approval, to exchange for Philippines currency United States gold coin or gold bars in sums of not less than 10,000 pesos or $5,000, charging for the same a premium sufficient to cover the expenses of transporting United States gold coin from New York to Manila, the amount of such premium to be determined by the secretary of finance and justice.

Fourth. To withdraw from circulation until paid out in response to demands made upon it, in accordance with the provisions of the act, Philippines currency exchanged and deposited in the Treasury.

Fifth. To withdraw from circulation United States paper currency and gold coin and gold bars received by the insular treasury in exchange for Philippines currency, until the same shall be called out in response to the presentation of Philippines currency, or until an insufficiency of Philippines currency shall make necessary an increased coinage, in which event, for the purpose of providing such coinage, the coin so obtained shall become part of the gold-standard fund.

The insular treasurer and the treasurers of the several provinces are authorized to exchange Philippine pesos on demand for the subsidiary and minor Philippine coins, and the reverse, in sums of 10 pesos or any multiple thereof.

The issue and redemption of silver certificates is to be conducted under the immediate supervision of the chief of the division of currency, and his books are to contain detailed accounts of the issue and redemption thereof. The treasurer is authorized to issue silver certificates upon receiving deposits of the standard Philippine pesos, in accordance with regulations fully provided in said act, which are designed to secure safety in the preparation of the plates, engraving, printing, and circulation thereof. The more important safeguards in this respect are that when the silver certificates have been entirely completed, cut, counted, and placed in proper bundles, they shall be deposited in the reserve vault, there to remain until required for circulation, and not to be considered while so remaining in the vault as available cash for the government, and shall not appear as such on the books of the treasury, although the treasurer shall be responsible for the same as money; that, from time to time, the treasurer shall withdraw such amount of silver certificates from the reserve vault as may be required to meet the demands for their purchase, in accordance with the provisions of section 8 of the act of Congress of March 2, 1903. All certificates so withdrawn from the reserve vault are to be thereafter treated as cash available for the government, and the pesos received in exchange for the silver certificates sold are to be deposited in the reserve vault and held for the payment of the certificates on demand, and shall constitute a trust fund to be used for no other purpose. Certificates mutilated or otherwise unfit for circulation when paid into the insular treasury shall not be reissued but retained for future destruction, with safeguards in the act fully provided.

The theory of the act of Congress referred to, and of the gold-standard act passed by the Commission, is substantially that a gold-standard circulating medium may be maintained at a parity with gold without any large use of a gold currency by the aid of the means provided for maintaining the parity between the two currencies. The essential elements of the system are based upon the maintenance of a reasonable gold-standard fund, the rigid restriction of the amount of new coinage so as to meet only the demands of commerce, the retirement of a sufficient amount of such coinage whenever it shall become apparent that there is more in circulation than the demands of commerce require, the issuance of more of the new currency whenever it becomes apparent that there is a shortage of such currency in circulation, and the furnishing of reasonable facilities for the conversion of gold coin or other money of the United States into Philippines currency, or the reverse, as the demands of commerce may require. The theory and system are substantially the same as those adopted by the British Government to maintain the parity of the rupee in India, by the Japanese Government to maintain the parity of the yen in Japan, and by the Dutch Government to maintain the parity between the silver coins in circulation and the gold standard in Java. The new currency system about to be inaugurated in the Straits Settlements is based upon the same theory. An attempt to introduce the same system upon a much larger scale, and particularly with reference to a silver coinage but a gold standard, for Mexico and a coinage that shall circulate throughout the Empire of China, has been under consideration during the past year, largely

through the instrumentality of commissions appointed by the United States Government and by the Republic of Mexico. The Philippines government is so largely interested in this question in its larger sense, particularly as it relates to the neighboring country of China, that $10,000, in money of the United States, has been appropriated from the insular treasury toward the payment of the expenses of that commission in its work in China.

Among other things provided by the act of Congress approved March 2, 1903, for maintaining the parity of the value of the silver Philippine peso and the gold Philippine peso, was one authorizing the issue of temporary certificates of indebtedness bearing interest at a rate not exceeding 4 per cent annually, payable at periods of three months or more, but not later than one year from the date of issue, in denominations of $25, or some multiple thereof, redeemable in gold coin or any lawful money of the United States, according to the terms of issue prescribed by the insular government, with a provision that the amount of such certificates outstanding at one time shall not exceed $10,000,000, money of the United States, and that such certificates shall be exempt from the payment of all taxes or duties of the government of the Philippine Islands, or any local authority therein, or the Government of the United States, as well as taxation in any form by or under any State, municipal, or local authority in the United States or the Philippine Islands; the proceeds of such certificates to be used exclusively for the maintenance of the parity and for no other purpose, except that a sum not exceeding $3,000,000 at any one time may be used as a continuing credit for the purchase of silver bullion in execution of the provisions of the act. In pursuance of this authority, the insular government on the 23d day of March, 1903, authorized the sale of $3,000,000 of such certificates, payable in one year in gold coin or money of the United States. These certificates were sold through the Bureau of Insular Affairs at Washington, at a premium of 2.513 per cent. The rate of interest being 4 per cent, and the time which they were to run being one year, after deducting the premium, the net interest paid would be 1.487 per cent. The money realized in this transaction was deposited to the credit of the gold-standard fund, with the Guaranty Trust Company in New York, which paid at the rate of 3½ per cent per annum for use of the money. It therefore resulted, inasmuch as the money remained for a considerable period on deposit with the Guaranty Trust Company, that the interest received from that deposit more than paid the interest above stated that the government must pay upon the cerificates, so that the transaction cost the government less than nothing, and was an actual source of profit.

On the 25th day of August, 1903, $3,000,000 more of the certificates, to run for the same period and to bear the same rate of interest, were sold at a premium of 2.24 per cent, and the proceeds were deposited with the Guaranty Trust Company at New York. The last issue of bonds sold at a slightly lower price than the first because of a greater stringency in the money market of New York at the time of the second sale. The special reasons for the exceedingly favorable terms upon which the certificates were sold were, first, the entire safety of the certificates; second, the fact that they were made exempt from taxation; and, thirdly, that the Secretary of the Treasury of the United States

authorized their deposit by national banks as security for deposits of United States funds held by the banks. The last circumstance gave to them an especial value.

These two transactions probably are unique in the history of government loans, in that the Government has actually made a profit out of its debts.

The facts in regard to the passage of the gold standard act and the introduction of the new currency have been brought down substantially to November 1, 1903, so that as much light as practicable may be thrown upon the workings of the new currency and upon the progress that has been made upon its inauguration.

Mr. E. W. Kemmerer, who was an instructor of economics in Purdue University, at Lafayette, Ind., and had made a special study of finance and currency, has been brought to the islands to aid in the establishment and maintenance of this new system, and was duly appointed to, and now occupies, the position of chief of the division of currency created by the gold standard act.

The opinion is confidently entertained by this office that no single step has been taken since American occupancy that will ultimately redound more to the business interests and prosperity of the islands, of its people and business men, than the successful inauguration of the new system of stable currency.

It is not to be anticipated that the new currency or United States currency can immediately supplant the use of the old. The moment that silver commences again to fall in value the intrinsic value of the existing local coins diminishes, and the more desirable they become for the use of the exporter and the large purchaser who employs native labor or buys native commodities. Selling his goods in the foreign markets of the world upon practically a gold basis, the gold which he receives will enable him to purchase more of the depreciated coin with which to pay his employees or to purchase commodities in the interior. The habitual price of commodities and of labor being fixed in local currency, is not materially affected by the change in the world value of that local currency; so that it will always be advantageous to the class of purchasers and exporters mentioned to make use of the cheaper currency in payment instead of the better one, and it is difficult to provide, except by extremely drastic legislation, measures that will prevent such use, to a certain extent, of the existing coins. It is not certain that it is in the interest of the commerce of the country that such steps should be taken now, if at any time.

The new currency upon a fixed and stable basis will have all the qualities of a legal tender, will be receivable for public dues, will be the official money of the country, can be converted at the treasury at a moment's notice into gold money of the world, and possesses such superior elements and advantages that all commercial transactions can be based upon it with safety and certainty, and Government forecasts can be made with all the advantages of an absolute gold currency. The great economic law that where a good currency and a debased one exist side by side, both having a debt-paying capacity, the bad currency drives out the good, has little application to the situation here. Such local currency as may remain in use in the islands will have no debt-paying capacity, except in fulfillment of special contracts payable in that commodity only, and will not be money in any technical

sense of that term. It will be a commodity pure and simple. It will not be a case of poor money driving out good money, because the only money will be good money. Nor is it feasible for the new coinage to be driven out to other countries by the local currency, because the Philippines currency is not a coin in circulation in other countries, and will there be available only for reexportation to the Philippine Islands, or for bullion, and for bullion purposes it will not be worth its current value in the Philippine Islands, unless the market price of silver should increase to a very marked degree and for a much larger percentage than appears within the range of probability. On the whole, it seems now almost certain that the new system, with a uniform gold standard, will be the actual basis throughout the Philippine Islands and in general use therein within a comparatively few months.

It ought to be remarked that, since the Philippine Government has announced that it is out of the market for the purchase of silver, the market price of silver has gradually fallen, owing in part to that announcement. At the same time the outflow of Mexican dollars from the islands has substantially ceased, because it is no longer profitable for purposes of exportation. It is not impossible that some may be imported in the near future.

Banks and Banking.

Since the last report from this office no new banks have been established in the islands by any governmental authority, nor have new offices been opened by American or other foreign banking institutions. The funds belonging to the insular government have been more largely retained in the treasury during the fiscal year 1903 than before that time, but the funds not so retained in the treasury vaults have been distributed between the Chartered Bank of India, Australia, and China; the Hongkong and Shanghai Banking Corporation; the International Banking Corporation of Connecticut, and the Guaranty Trust Company of New York, at New York and Manila—all authorized depositaries for funds of the United States Government and for the government of the Philippine Islands. At the close of the fiscal year 1903 funds belonging to the insular treasury were distributed as follows:

Where deposited.	Philippines currency.	United States currency.	Local currency.
Insular treasury		$4,141,304.02	
Chartered Bank of India, Australia, and China	$492,489.24	363,523.11	$138,001.88
Hongkong and Shanghai Banking Corporation	476,839.77	745,690.92	167,737.09
International Banking Corporation	465,555.24	735,840.60	177,785.43
Guaranty Trust Co.:			
At New York		1,586,873.49	
At Manila	499,787.40	682,528.99	213,971.98

The so-called "American Bank" was organized in the city of Manila during the fiscal year 1902, with a paid-up capital of $25,000, which has not been increased up to the present time. That corporation was formed as a corporation by voluntary association under the

Spanish laws, no new general corporation laws having been passed by the Philippine Commission, and no charter having been granted to the American Bank by the Commission. Its status as a legal corporation is doubtful, in view of the fact that the granting of franchises is deemed to be an act of the sovereign power, and that the present sovereign power has never sanctioned or authorized the granting of any franchise to the American Bank, or to any other corporation formed after the American occupancy by virtue of existing Spanish laws.

In the former report from this office a recommendation was made that Congress be urged to provide for a banking system in the Philippine Islands, or specifically to authorize the Commission to establish such system, with the right to authorize the issue of bank notes. The Congress has legislated upon the subject of currency in the Philippine Islands without providing for the creation of banks of issue. It is doubtful whether the recommendation made in the former report ought now to be renewed. Since the date of that report provision has been made for the institution of a wholly new currency system for the islands, including the issue of silver certificates by the treasurer in exchange for Philippine pesos deposited in the treasury for their redemption. While the new silver certificates are not legal tender in the payment of ordinary obligations, though they are receivable for public dues, and are not bank notes, nor money in the ordinary sense of those terms, yet they form a convenient means of exchange in ordinary commercial transactions, and perform to some degree the functions of ordinary paper currency. It is probably advisable that the workings of the new system should be observed for a time before asking for further legislation in that respect. It is possible that the new silver certificates, coupled with a large amount of United States paper currency which is now in circulation in the islands, and is legal tender, together with the amount of bank notes that are in circulation issued by the Spanish-Filipino Bank, will furnish all the facilities for the present that are needed. It is therefore recommended that Congress be not asked to legislate at its coming session in regard to the establishment of banks of issue.

2. EXTRACT FROM THE REPORT OF THE CHIEF OF THE BUREAU OF INSULAR AFFAIRS, WAR DEPARTMENT, 1904.

PHILIPPINE CURRENCY.

At the date of my last annual report, October 31, 1903, it was shown that a total in pesos, subsidiary and minor coinage of ₱17,881,650 had been coined and shipped to the islands; that the purchase of silver bullion had been suspended, and that the Philippine Commission had determined that this amount of pesos, supplemented by the recoinage of Spanish-Filipino coins, which they estimated was some 12,000,000 pesos, would be adequate for the inauguration of the coinage circulation in the Philippines. Experience in the past year has proved the accuracy of the Commission's estimate, especially as to the amount of Spanish-Filipino coins.

There have already been withdrawn from circulation, shipped to the United States, recoined into the new currency, and reshipped to

the islands and there entered into circulation, or in transit or awaiting shipment, a total of 11,723,000 Spanish-Filipino pesos, as follows:

Date.	Invoice.		Face value in Spanish-Filipino currency.	Value in Philippine currency at prevailing ratio date of shipment.	Value in United States currency.
			Pfs.		
Nov. 13, 1903	Pesos	90,000.00	600,000.00	₱521,739.13	$260,869.56
	Med. pesos	510,000.00			
Dec. 11, 1903	Pesos	200,000.00	400,000.00	347,826.09	173,913.05
	Med. pesos	110,000.00			
	Peseta	90,000.00			
Feb. 10, 1904	Pesos	500,000.00	[a]1,556,000.00	1,414,545.45	707,272.72
	Med. pesos	1,000,000.00			
	Peseta	52,000.00			
	Med. peseta	4,000.00			
Mar. 15, 1904	Pesos	310,465.00	[b]1,090,000.00	990,909.09	495,454.55
	Med. pesos	755,000.00			
	Peseta	22,000.00			
	Med. peseta	2,468.50			
	Mixed	66.50			
Apr. 14, 1904	Pesos	585,000.00	1,230,000.00	1,088,495.57	544,247.78
	Med. pesos	625,000.00			
	Peseta	20,000.00			
May 12, 1904	Pesos	810,000.00	1,810,000.00	1,601,769.91	800,884.96
	Med. pesos	900,000.00			
	Peseta	100,000.00			
June 13, 1904	Pesos	105,000.00	1,000,000.00	909,090.90	454,545.45
	Med. pesos	865,000.00			
	Peseta	25,000.00			
	Med. peseta	5,000.00			
July 14, 1904	Pesos	169,000.00	1,102,000.00	975,221.24	487,610.62
	Med. pesos	846,000.00			
	Peseta	83,500.00			
	Med. peseta	3,500.00			
Aug. 15, 1904	Pesos	100,000.00	430,000.00	890,909.09	195,454.54
	Med. pesos	325,000.00			
	Peseta	5,000.00			
Sept. 13, 1904	Pesos	155,000.00	1,055,000.00	959,090.90	479,545.45
	Med. pesos	825,000.00			
	Peseta	68,500.00			
	Med. Peseta	6,500.00			
Oct. 15, 1904	Invoice not received		950,000.00	863,636.36	431,818.18
Oct. 31, 1904	Awaiting shipment		500,000.00	454,545.45	227,272.72
	Total		11,723,000.00	10,517,779.18	5,258,889.59

[a] The shipment of February 10 contained, in addition to 1,566,000 pesos, 39,490 kilograms of bar silver and 50,585 kilograms of blanks, the bar silver assaying 1,171.39 standard ounces and the blanks 1,514.11 standard ounces.

[b] The shipment of March 15 contained also burnt silver which assayed 463 standard ounces.

The weight in standard ounces after melting, and the United States currency value of the silver contained in the Spanish-Filipino coins, is shown in the following table, covering shipments upon which reports have been received, namely:

Date of shipment.	Face value in Spanish-Filipino currency.	Yield.	Bullion value in United States currency.
	Pfs.	*Standard oz.*	
November 13, 1903	600,000.00	465,092.53	$268,822.62
December 11, 1903	400,000.00	318,357.10	180,782.94
February 10, 1904	1,556,000.00	1,214,196.84	700,498.18
March 15, 1904	1,090,000.00	848,974.04	489,792.72
April 14, 1904	1,230,000.00	965,313.85	556,911.85
May 12, 1904	1,810,000.00	1,420,125.90	819,303.40
Total	6,686,000.00	5,227,060.26	3,015,611.71

From the foregoing statement it will appear the expectation has been realized that the Spanish-Filipino coins would contain so much pure silver as to make their recoinage profitable, because the value of the silver contained in these coins would be equal or slightly above the market value of bullion.

The same methods of shipment as described in detail in the last annual report have been followed without the loss of a centavo. A small shipment of minor coinage was corroded by water, due to an accident in the carrying ship. This slight damage was covered by insurance, which paid the cost of reburnishing the metal.

There has been recoined and returned to Manila from the Spanish-Filipino coins sent to the San Francisco mint an aggregate of ₱7,276,016 in denominations, as shown by statement following, representing shipments to October 31, 1904:

Denomination.	Amount coined in pesos.	Standard ounces.	Approximate cost.
Peso	₱6,558,000.00	5,683,600.00	$3,279,000.00
50 centavos	264,000.00	228,800.00	132,000.00
20 centavos	232,016.00	200,838.85	115,868.57
10 centavos	222,000.00	192,168.75	110,866.58
Total	7,276,016.00	6,305,407.60	3,637,735.15

Under authority of United States law the civil governor, on the 23d day of October, 1903, issued a proclamation "That Mexican silver dollars shall be receivable for public dues, at a rate to be fixed from time to time by the proclamation of the civil governor, until the first day of January, nineteen hundred and four, and that on and after that date such coins shall cease to be so receivable." Steps were taken to get in and retire from circulation the Spanish-Filipino coinage by fixing the ratio from time to time. On June 21, 1904, an executive order was issued providing that "No Mexican pesos will be received in payment of public dues, and neither Mexican pesos or Spanish-Filipino coins will be purchased by the government between June thirtieth and September thirtieth, nineteen hundred and four, and after the last-named date they will be purchased only at their bullion value." On January 1, 1904, the Mexican peso was demonetized and their further importation prohibited. On January 7 drastic legislation was passed, effective October 1, discouraging the further circulation of anything but the new Philippine and United States currency. This legislation provided for a progressive tax on commercial paper and bank deposits in other than currency based upon the gold standard. Under these provisions the Mexican currency in the islands found a more favorable exchange in other near-by countries and was gradually exported from the islands. This exportation was facilitated by reason of the unusual demand for them due to abnormal conditions in north China. The Spanish-Filipino currency has been practically all recoined. The circulating currency is now, therefore, the new Philippine coinage and such moneys of the United States as find their way to the islands.

On October 30, 1904, the civil governor reported by cable on the working of the new currency system as follows:

"The approach of October 1, when first currency-taxing provisions became effective, caused large exports of Mexican pesos commercially and large inflow of Spanish-Filipino coins in the treasury.

"In September 1,197,500 Mexican pesos were exported and 538,622 Spanish-Filipino pesos came into the treasury and were withdrawn from circulation. During September actual circulation of new currency increased 1,891,000 pesos. In October to date 1,682,995 pesos Mexican currency have been exported commercially, and 950,000 Spanish-Filipino pesos received by insular government for recoinage. Have on hand nearly 500,000 Spanish-Filipino pesos for recoinage. Increase of actual circulation new coins for October approximately 1,300,000 pesos.

"Every bank in Manila published notices refusing to receive old currency on deposit after September 30. Railroads receive no old currency at any price. Nearly all accounts of banks throughout the islands have been reopened in the new currency. Banking business has called in its old notes; issued new ones based upon the new currency. All new contracts are being made new currency.

"Business throughout the archipelago conducted now mainly on new basis, banks and large dealers cooperating with the government. Very little old currency left, and existing taxing provisions will eliminate that by January 1 next. The gold standard is an established fact and now meets approval of the entire public. Business conditions much improved."

On the date of this report there are in the islands 24,924,520 new Philippine pesos, of which ₱15,963,043 are in actual business circulation. The balance is in the treasury, banks, or in the hands of disbursing officers. The above ₱15,963,043 of course includes the silver certificates, of which ₱7,230,000 are in circulation.

The various steps taken by the civil government to gain this result were met by violent opposition and predictions of inevitable disaster, made to the government officials both in Manila and Washington, but in every case, as soon as definite legislative action had been taken, the atmosphere cleared, and the business interests commended, by acquiescence and cooperation, the action of the government.

The Philippine currency act was passed by Congress April 3, 1903. The first new Philippine peso was placed in circulation July 23, 1903.

Since that time the Government has eliminated thirty or forty millions of debased currency and has substituted for it a currency based upon the gold standard without serious jar or dislocation, all accomplished within seventeen months. In the minds of financiers and bankers, this accomplishment is considered a wonderful achievement, unique in the history of the world.

SILVER CERTIFICATES.

In the last report it was shown that the following amounts of silver certificates, or paper money, with respective denominations, had been shipped to the Philippines:

₱2,000,000 in 2's.
4,000,000 in 5's.
4,000,000 in 10's.

Since November 1, 1903, there have been forwarded additional silver certificates aggregating 7,980,000 pesos, making a total issue to this date of 17,980,000 pesos of denominations as follows:[a]

	Pesos.
2-peso certificates	2,330,000
5-peso certificates	4,650,000
10-peso certificates	11,000,000

Orders have been placed with the Bureau of Engraving and Printing for an amount which, with the above total, will aggregate 20,000,000 pesos in value, and there are still due from said department for delivery to the insular treasury the following certificates:

	Pesos.
2-peso certificates	670,000
5-peso certificates	1,350,000

Such shipments of certificates have been insured in each instance, and the expenditures that have been incurred in connection with their preparation and shipment have been paid from Philippine revenues by the disbursing officer of this Bureau as follows:

Date of shipment.	Forwarded on transport—	Peso value.	Insurance.	Cost of preparing.	Total cost.
Feb. 20, 1904	Sherman	2,040,000	$31.25	$3,756.24	$3,787.49
Apr. 30, 1904	Thomas	1,000,000	25.00	1,471.19	1,496.19
May 26, 1904	Sheridan	1,990,000	31.25	2,076.37	2,107.62
June 23, 1904	Sherman	2,950 000	31.25	3,078.03	3,109.28
	Total		118.75	10,381.83	10,500.58

The Philippine Commission has advised the War Department that at present only the largest denomination that the act of Congress authorizes—namely, 10-peso certificates—are in demand, and also that it is very desirable that Congressional authority be secured to issue larger denominations. This recommendation was brought to the attention of Congress and has resulted in the following provision in the before-mentioned bill, which is pending in the Senate:

"SEC. 10. That section 8 of an act of Congress approved March 2, 1903, entitled 'An act to establish a standard of value and to provide for a coinage system in the Philippine Islands,' is hereby amended by striking out the word 'ten' in said section and inserting in lieu thereof the words 'five hundred,' so that said section when amended shall read as follows:

"SEC. 8. That the treasurer of the Philippine Islands is hereby authorized, in his discretion, to receive deposits of the standard silver coins of 1 peso authorized by this act to be coined, at the treasury of the government of said islands or any of its branches, in sums of not less than 20 pesos, and to issue silver certificates therefor in denominations of not less than 2 nor more than 500 pesos, and coin so deposited shall be retained in the treasury and held for the payment of such certificates on demand, and used for no other purpose. Such certificates shall be receivable for customs, taxes, and for all public dues in the Philippine Islands, and when so received may be reissued, and when held by any banking association in said islands may be counted as a part of its lawful reserve."

[a] Since the above was written the remainder of the 20,000,000 pesos has been shipped.

Redemption of Philippine Silver Certificates.

In August last the Treasury Department stated they were constantly having Philippine silver certificates presented for redemption. As no provision had been made for the redemption in the United States of Philippine paper money, the civil governor was communicated with and authority obtained so that such silver certificates might be redeemed through both of the depositary banks, charging such bills against the gold-standard fund on deposit with the bank, transmitting monthly by registered mail the certificates to the insular treasurer at Manila.

Temporary Certificates of Indebtedness.

Under the provisions of section 6 of the act of Congress approved March 2, 1903—Philippine currency act—there were sold prior to November 1, 1903, two issues of temporary certificates of indebtedness amounting each to $3,000,000. The first issue maturing May 1, 1904, was for the purpose of establishing a continuing credit for the purchase of silver bullion. The proceeds of the sale of the second issue, maturing September 1, 1904, was for the maintenance of the parity.

On October 10, 1903, the Philippine Commission passed an act constituting a gold-standard fund in the Philippine treasury, in the following language: "An act constituting a gold-standard fund in the insular treasury for the purpose of maintaining the parity of the silver Philippine peso with the gold-standard peso, and organizing a division of the currency in the bureau of the insular treasury through which such fund shall be maintained, expenditures made therefrom, and accretions made thereto, and providing regulations for the exchange of currencies and for the issue and redemption of silver certificates."

The first section of this act reads as follows:

"Section 1. All funds in the insular treasury which are the proceeds of the certificates of indebtedness issued under and by authority of section six of an act of Congress entitled "An act to establish a standard of value and to provide for a coinage system in the Philippine Islands," approved March second, nineteen hundred and three, all profits of seigniorage made by the insular government in the purchase of bullion and the coinage therefrom, and the issue of Philippine pesos and the subsidiary and minor coins, all profits from the sale of exchange by the insular government between the Philippine Islands and the United States made for the purpose of continuing the parity of the silver Philippine peso with the gold-standard peso, and all other receipts in the insular treasury inuring to the insular government in the exercise of its functions of furnishing a convenient currency for the islands, shall constitute a separate and trust fund in the insular treasury to be known as the "gold-standard fund," and to be used for the purpose of maintaining the parity of the silver Philippine peso with the gold-standard peso provided in the said act of Congress, approved March second, nineteen hundred and three. Such fund shall not be used to pay any expenses of the insular government or to satisfy any of the appropriations of the insular government, except only those connected with the purchase of bullion, the coinage of the same into the money of the Philippine Islands, and those

which are incident to the transportation of such money to the Philippine Islands from the place of coinage, to the putting of money into circulation, including the preparation and issue of silver certificates, and to the carrying on of such financial transactions, by exchange and otherwise, as may be authorized by law to maintain the circulation of the currency provided for in the said act of Congress approved March second, nineteen hundred and three, and the subsidiary and minor coinage provided for by said act and by an act of Congress entitled "An act temporarily to provide for the administration of the affairs of civil government in the Philippine Islands, and for other purposes," approved July first, nineteen hundred and two, and to the maintenance of the parity of value between the silver Philippine peso and the subsidiary and minor coins, the coinage of which is provided for by the acts above mentioned, and the gold peso, which by the act of March second, nineteen hundred and three, is made the standard of value in the Philippine Islands: *Provided*, That whenever the public interest permits there may be withdrawn from the gold-standard fund such amount as the Philippine government may deem proper to pay the principal and interest of all, or any part of, the certificates of indebtedness issued under section six of the said act of Congress of March second, nineteen hundred and three."

The proceeds of these two issues, together with the seigniorage, constituted a gold-standard fund.

In February of this year the civil government of the Philippine Islands advised the War Department by cable that the Philippine Commission considered it advisable to take up the first issue of these certificates, which matured May 1, 1904, by a third isue of $3,000,000. The same method as was followed in the advertisement of public sale of the other issues, and which is set forth in detail in my last annual report, was followed in the sale of the new issue. The Secretary of the Treasury authorized the following statement as to their recognition by the Treasury Department:

"These certificates of indebtedness will be at once accepted at par by the Treasury Department as security for deposits of the public money of the United States in national banks in substitution for State, municipal, or Philippine bonds, and certificates of indebtedness now held to secure such deposits; and in substitution for United States bonds now held as security for deposits, on condition that the Government bonds thus released be used as security for additional circulation whenever, in the judgment of the Secretary of the Treasury, it is desirable to stimulate an increase in national-bank circulation."

Bids were opened on April 15, 1904, and it was found that the bid of the American National Bank, of Kansas City, Mo., of $101.181 for the entire issue was the most advantageous, and the award was accordingly made. This thus puts the bond on a basis a little over 2¾ per cent. This issue was oversubscribed ten times.

These certificates, like the former ones, were each for $1,000, and numbered serially from 6001 to 9000.

The total proceeds amounted to $3,035,430, and the first issue of certificates, numbered from 1 to 3000, maturing May 1, 1904, was paid off by the proceeds of the last sale of certificates.

On the 7th of July, 1904, Governor Wright advised the War Department by cable that although the Philippine government could without embarrassment pay off and retire second issue maturing September 1, 1904, it was thought wise to make an additional one for that purpose. The Secretary of the Treasury authorized the same statement as to their recognition as with the last preceding issue.

The same method as heretofore was followed in the sale, and in the presence of bidders, on October 22, 1904, when the bids were opened it was found that the bid of $101.41 by M. L. Turner, of Oklahoma City, Okla., was the most advantageous, which was accordingly accepted, and, with interest considered, placed the bonds on nearly a 2¼ per cent basis. This issue was oversubscribed nine times. These certificates were numbered from 9001 to 12000, and of the same denomination as formerly.

The proceeds of the issue, $3,042,300, were deposited with the insular depositary in New York City and were used to pay off the second issue.

At the time of the sale of these two issues the money market was what is called "easy" or "a soft bond market." Expert financiers anticipated that the Government could expect but a very slight premium, if any, and the sale was therefore gratifying to the Philippine government and hardly to be anticipated by the state of the money market. It was due not only to the credit of the Philippine government, but also to the recognition given by the United States Treasury Department.

Philippine Land (Friar) Purchase Bonds.

In the past year the negotiations for the purchase of the so-called friar lands had resulted in contracts covering upward of 410,000 acres, at a price of $7,239,000 gold.

In the act of Congress approved July 1, 1902, the following provisions for the issue of bonds for the purchase thereof appears:

"Sec. 63. That the government of the Philippine Islands is hereby authorized, subject to the limitations and conditions prescribed in this act, to acquire, receive, hold, maintain, and convey title to real and personal property, and may acquire real estate for public uses by the exercise of the right of eminent domain.

"Sec. 64. That the powers hereinbefore conferred in section sixty-three may also be exercised in respect of any lands, easements, appurtenances, and hereditaments which, on the thirteenth of August, eighteen hundred and ninety-eight, were owned or held by associations, corporations, communities, religious orders, or private individuals in such large tracts or parcels and in such manner as in the opinion of the Commission injuriously to affect the peace and welfare of the people of the Philippine Islands. And for the purpose of providing funds to acquire the lands mentioned in this section said government of the Philippine Islands is hereby empowered to incur indebtedness, to borrow money, and to issue, and to sell at not less than par value, in gold coin of the United States of the present standard value or the equivalent in value in money of said islands, upon such terms and conditions as it may deem best, registered or coupon bonds of said government for such amount as may be necessary, said

bonds to be in denominations of fifty dollars or any multiple thereof, bearing interest at a rate not exceeding four and a half per centum per annum, payable quarterly, and to be payable at the pleasure of said government after dates named in said bonds not less than five nor more than thirty years from the date of their issue, together with interest thereon, in gold coin of the United States of the present standard value or the equivalent in value in money of said islands; and said bonds shall be exempt from the payment of all taxes or duties of said government, or any local authority therein, or of the Government of the United States, as well as from taxation in any form by or under State, municipal, or local authority in the United States or the Philippine Islands. The moneys which may be realized or received from the issue and sale of said bonds shall be applied by the government of the Philippine Islands to the acquisition of the property authorized by this section, and to no other purposes.

"SEC. 65. That all lands acquired by virtue of the preceding section shall constitute a part and portion of the public property of the government of the Philippine Islands, and may be held, sold, and conveyed, or leased temporarily for a period not exceeding three years after their acquisition by said government on such terms and conditions as it may prescribe, subject to the limitations and conditions provided for in this act: *Provided*, That all deferred payments and the interest thereon shall be payable in the money prescribed for the payment of principal and interest of the bonds authorized to be issued in payment of said lands by the preceding section, and said deferred payments shall bear interest at the rate borne by the bonds. All moneys realized or received from sales or other disposition of said lands or by reason thereof shall constitute a trust fund for the payment of principal and interest of said bonds, and also constitute a sinking fund for the payment of said bonds at their maturity. Actual settlers and occupants at the time said lands are acquired by the government shall have the preference over all others to lease, purchase, or acquire their holdings within such reasonable time as may be determined by said government."

About the 18th of December, 1903, the civil governor of the Philippine Islands notified the War Department of the closing of the contract, which had the approval of the Secretary of War, and the question of issuance of bonds, what kind they should be, amount, denominations, and the various details as to engraving, printing, payment, interest, and all other information necessary to their advertisement and sale was taken up by cable. Much work was necessary to make decision and work out all these details. All the experts of the various bureaus of the Treasury Department had to be consulted, and as well was it necessary to gain practical information as to the best method of floating these bonds, which information was as kindly furnished by expert financiers of New York houses connected with bonding companies as it was by the experts of the Treasury Department.

Registered bonds were determined upon. It was believed unwise to open a separate registering office in the Bureau of Insular Affairs, if the Philippine government could make use of the expert Register Office of the Treasury Department. The Secretary of the Treasury, on the request of the Secretary of War, kindly undertook this work, as well as the payment by the Treasurer of the interest on the bonds,

the method being to transfer, through the disbursing officer of this Bureau, to the Treasury Department the amount of Philippine money that was necessary to meet these payments. In coming to this conclusion it became necessary for the Secretary of the Treasury and the Secretary of War to ask the opinion of the Attorney-General as to the construction of certain language of the above section, which opinion is embodied in the appendix.

The Philippine government limited the issue to $7,000,000, since the indications were that the premium would easily cover the additional contract amount.

Accordingly, on December 30, 1903, a circular was issued announcing that the bonds would be dated February 1, 1904, bearing interest at 4 per cent, payable quarterly, redeemable at the pleasure of the Philippine government after ten years, and payable in thirty years after date of issue in gold coin of the United States; both principal and interest being payable at the Treasury of the United States; that the bonds would be registered and transferable at the office of the Register of the Treasury; that they should be in denominations of $10,000 and $1,000 in proportion to suit the purchaser or purchasers; that bids would be opened January 11, 1904, and delivery of interim certificates made February 1, 1904, for which the engraved bonds would be substituted later.

The Secretary of the Treasury authorized the statement—

"That the Philippine land-purchase bonds will be accepted at par as security for deposits of public money, should further deposits be made; and may be substituted for Government bonds now held as security for deposits on condition that the Government bonds thus released be used as security for additional circulation whenever, in the judgment of the Secretary of the Treasury, it is desirable to stimulate an increase in national-bank circulation."

This circular was given the widest publicity in the United States and in Manila. When the bonds were opened on January 11, 1904, they were found to contain, in all, tenders for $33,237,000.

The most advantageous bid was found to be the joint one of Harvey Fisk & Sons, Fisk & Robinson, and the National City Bank of New York, of $107,577 for the entire $7,000,000, and they were accordingly awarded the bonds. The premium realized was thus $530,390, which more than justified the decision to limit the issue to $7,000,000.

The money was equally divided between the two Philippine depositaries in the United States, with interest for the six months period contemplated in the contract of purchase at the rate of 3½ per cent. The bonds were thus floated at practically 3 per cent. But $2,000,000 of this amount has been paid out. This $2,000,000, at the request of the title holder, is awaiting payment in London.

The examination of the titles of all the friar lands have been concluded. The survey of the British-Manila Estates Company (Limited) has been accepted by its representative, and $200,000 have been paid from the friar fund in New York, and $98,782.07 paid in cash in Manila.

These estates include the two haciendas of San Juan and San Nicolas, in the town of Imus (usually known as the "Imus estate"), in the province of Cavite, consisting of 18,419 hectares, 56 ares, and 12 centares, formerly the property of the Recoletos order in the Philippines.

Likewise the survey of the estates called Sociedad Agricola de Ultramar have been accepted by its representative. This includes the former estates of the Augustinian order in the Philippines, comprising some 18 different haciendas or estates, of which the purchase price was some $2,212,404. Two million dollars of this amount have been transferred from New York to London, in accordance with and awaiting the demand of its representative, and the balance was paid in Manila.

In the case of the Philippine Sugar Estates Development Company (Limited), comprising the lands formerly owned by the Domican order, a joint survey of several of the haciendas, which the government survey had shown to be short to the amount of the value of several hundred thousand dollars, has been requested by the government. Again, questions have arisen as to the titles of the large haciendas of Biñan, Santa Rosa, Santa Cruz de Malabon, together with a portion of Lolomboy.

It is the opinion of the government attorney who examined the titles that the title was in a separate and independent foundation, which had never joined in the conveyance. The amount of the purchase price aggregates $3,671,657, to be definitely determined according to the resurvey.

Pay for that part of these estates as to which there is no doubt has been offered, as well as a proposition to bring the titles in dispute before the courts. The government is anxious to gain complete possession of these lands to parcel them out, not only in order that the transaction should be completed, but also that the land may be earning legitimate revenue for the friar land fund.

Depositaries of Philippine Funds.

The Guaranty Trust Company and the International Banking Corporation remain the two depositaries of insular funds in New York. The latter bank maintains a branch office in Washington and also in Manila. The same two English corporations—the Hongkong and Shanghai Banking Corporation, and the Chartered Bank of India, Australia, and China—continue as depositaries in Manila of insular funds. All such funds are secured by bonds with the American Surety Company of New York and the Fidelity and Deposit Company of Maryland. These two surety companies have also contracts for bonding all insular employees who disburse moneys.

The treasury of the Philippine Islands still remains the only depositary designated under the act of July 1, 1902, of the public moneys of the United States in the Philippine Islands.

The following statements will indicate the business with these banks in the United States as depositaries of the funds of the civil government of the Philippine Islands:

Statement of the account of the Guaranty Trust Company of New York in account with the civil government of the Philippine Islands, October 31, 1904.

Debtor.		
Balance Oct. 31, 1903:		
Gold standard fund	$3,146,003.61	
Congressional relief fund	82,033.69	
		$3,228,037.30
Deposits:		
Treasurer of the United States		8,805,922.77
Land purchase bond account		150,000.00
Certificates of indebtedness		6,017,730.00
Proceeds, sale proof coin sets		7,456.00
J. G. Jester, disbursing agent		140,019.48
C. H. Whipple		258.00
American National Bank, Kansas City		30,000.00
M. L. Turner, bond award		30,000.00
Cash for drafts issued		1,138,252.29
Auditor for War Department		58.38
Superintendent of mint, Philadelphia		13,782.95
Superintendent of mint, San Francisco		8,661.82
Interest on deposits		183,530.08
		19,753,809.07
Balance Oct. 31, 1904		4,787,601.68

Creditor.		
Withdrawals:		
Insular treasurer's transfer drafts		$3,896,853.39
Transferred to London on friar lands account		2,000,000.00
Treasurer of the United States		70,000.00
James G. Jester, disbursing agent, Washington, D. C.		8,590,000.00
Carson Taylor, disbursing office, exposition board		306,490.22
M. P. Healy, disbursing office, exposition board		6,000.00
J. S. Manning, disbursing office, constabulary		36,863.78
Thos. Hardeman, disbursing office, honorary commission		60,000.00
Balance due the insular government—		
Friar lands bond fund	$1,766,238.07	
Gold standard fund	2,141,198.67	
General fund	880,164.94	
		4,787,601.68
		19,753,809.07

Statement of the account of the International Banking Corporation at Washington, D. C., in account with the civil government of the Philippine Islands.

Debtor.	
Deposits:	
Treasury of the United States	$4,145,187.00
United States Quartermaster's Department	10,000.00
Miscellaneous receipts and refunds	2,668.77
Proceeds from damaged $20 note received from treasurer, Philippine Islands	20.00
Interest on deposits	83,024.16
	4,240,899.93
Balance Oct. 31, 1904	3,797,899.93

Creditor.		
Withdrawals, J. G. Jester, disbursing agent, Washington		$443,000.00
Balance due the insular government:		
General fund	$131,556.86	
Friar lands bond fund	3,666,343.07	
		3,797,899.93
		4,240,899.93

Mention has already been made of the fact that the money realized from the sale of the land purchase, or friar bonds, was equally divided between the two depositaries in the United States at the rate of 3½ per cent for a period of six months, and at the end of that period, which was about June 22, 1904, the banks represented that they were not justified in paying that rate of interest thereafter on account of the large amount of ready money in the market at that time, as well as the fact that this money was virtually on call by the Philippine government. The Philippine government acquiesced and the interest was accordingly reduced.

The unpaid balance of the so-called friar money is on call with the Guaranty Trust Company at 2 per cent and with the International Banking Corporation at 2½ per cent, under the condition of fifteen days' notice of withdrawal.

For the same reasons the interest on the gold-standard fund with the Guaranty Trust Company was reduced from 3½ to 2½ per cent, the relief fund from 3½ to 2½ per cent, the Treasurer's general account is 2 per cent with both the Guaranty Trust Company and the International Banking Corporation, being reduced from 3 per cent, and the funds to the credit of the disbursing agent of this Bureau is 2 per cent with both banks.

Interest on Philippine funds deposited with the Guaranty Trust Company of New York and the International Banking Corporation, New York (also Washington branch), October 1, 1903, to September 30, 1904.

Fund.	Guaranty Trust Co. of New York.	International Banking Corporation.	Total.
Friar land	$71,043.07	$77,262.70	$148,305.77
Gold standard	76,259.35		76,259.35
Treasurers' general account	18,371.28	1,811.13	20,182.41
Disbursing agent, Philippine revenues	8,250.92	3,950.33	12,201.25
Relief	9,605.46		9,605.46
Total	183,530.08	83,024.16	266,554.24

NOTE.—Interest on disbursing agent's funds is credited to general account of treasurer.

METHOD OF TRANSFER OF FUNDS BETWEEN THE UNITED STATES AND THE PHILIPPINE ISLANDS.

The gold-standard act provides that the insular treasury or the Philippine depositaries in the United States may sell on demand, in sums of not less than 10,000 pesos, or $5,000, exchange against the gold-standard fund, charging for the same a premium of three-quarters of 1 per cent for demand drafts and 1¼ per cent for telegraphic transfers. Under the discretionary power of the same act, the secretary of finance and justice of the Philippine Islands has but recently changed these rates, respectively, to three-eights of 1 per cent and three-quarters of 1 per cent, which affords a cheap method for the transfer of funds both ways without actual transportation of the money.

When the Philippine government desired to increase the money on deposit with the New York depositaries, it has been accomplished by taking advantage of the War and Navy departments' desire to transfer United States money belonging to any of their bureaus from the United States to the Philippines. The method being followed is to notify the civil governor by cable of the bureau desiring transfer and the amount to be deposited in the treasury of the Philippine Islands, as depositary of the United States. The Philippine treasurer, when that has been accomplished, informs by cable the Treasurer of the United States, who in turn transmits an equal amount to such Philippine depositary as this Bureau designates in New York, and then the amount so placed with the treasurer of the Philippine Islands is subject to the directions of the Treasurer of the United States.

3. AN ACT [No. 1042] FOR THE PURPOSE OF MAINTAINING THE PARITY OF THE PHILIPPINES CURRENCY IN ACCORDANCE WITH THE PROVISIONS OF SECTIONS ONE AND SIX OF THE ACT OF CONGRESS APPROVED MARCH SECOND, NINETEEN HUNDRED AND THREE, BY PROHIBITING THE IMPORTATION INTO THE PHILIPPINE ISLANDS OF CERTAIN KINDS OF COINS.

By authority of the United States, be it enacted by the Philippine Commission, that:

SECTION 1. The importation into the Philippine Islands of Mexican currency, Spanish-Filipino currency, or any other metallic currency which is not upon a gold basis, is hereby prohibited; and any of the aforementioned currencies which are imported, or of which the importation is attempted, contrary to the provisions of this act, shall be liable to forfeiture, under due process of law, the bullion value, in terms of Philippines currency, of one-third of the sum so forfeited to be payable to the person upon whose information, given to the proper authorities, the seizure of the money so forfeited is made, and the other two-thirds to be payable to the Philippine government, and to accrue to the gold-standard fund: *Provided*, That money actually on shipboard in transit to the Philippine Islands, and for which bills of lading have been made out on or prior to the date of the passage of this act, shall be permitted to enter: *And provided further*, That each first-class passenger shall be permitted to bring into the Philippine Islands a sum of the aforementioned currencies not exceeding in value fifty Philippine pesos; each second-class passenger a sum not exceeding twenty Philippine pesos; and each third-class passenger a sum not exceeding ten Philippine pesos.

SEC. 2. The importation or the attempt to import any of the said currencies contrary to law is hereby declared a criminal offense, punishable, in addition to the forfeiture of said currency as above provided, by a fine of not more than ten thousand pesos or imprisonment for a period not exceeding one year, or both, in the discretion of the court.

SEC. 3. The provisions of section one of this act shall be enforced by the collector of customs of the Philippine Islands in accordance with the provisions of act numbered three hundred and fifty-five, as amended by act numbered eight hundred and sixty-four, except that currency seized and forfeited under the provisions of this act shall not be sold at auction, but shall, as provided in section one of this act, be paid into the treasury of the Philippine Islands to the credit of the gold-standard fund, and the sum due to the informer shall be paid in Philippines currency by the treasurer from that fund.

SEC. 4. This act shall take effect on its passage.

Enacted, January 14, 1904.

4. AN ACT (No. 1045) FOR THE PURPOSE OF PROVIDING REVENUE AND OF MAINTAINING THE PARITY OF THE PHILIPPINES CURRENCY IN ACCORDANCE WITH THE PROVISIONS OF SECTIONS ONE AND SIX OF THE ACT OF CONGRESS APPROVED MARCH SECOND, NINETEEN HUNDRED AND THREE, BY PROVIDING FOR THE PURCHASE OF MEXICAN DOLLARS AS BULLION, BY IMPOSING A TAX UPON WRITTEN CONTRACTS PAYABLE IN CERTAIN KINDS OF CURRENCIES, AND BY REQUIRING THE PAYMENT OF A LICENSE TAX BY ALL PERSONS, FIRMS, OR CORPORATIONS CONDUCTING THEIR CURRENT BUSINESS, EITHER WHOLLY OR IN PART, IN SAID CURRENCIES, AND FOR OTHER PURPOSES.

By authority of the United States, be it enacted by the Philippine Commission, that:

SECTION 1. For the purpose of this act, the expression "local currency" shall signify Mexican coins, Spanish and Spanish-Filipino coins, and all other metallic moneys not upon a gold basis in circulation in the Philippine Islands, and bank notes payable in said moneys.

SEC. 2. The secretary of finance and justice is hereby authorized, whenever in his judgment the public interest may require, to direct the insular treasurer and all provincial and municipal treasurers to purchase Mexican dollars as bullion at their bullion value, said value to be determined from time to time by the insular treasurer, with the approval of the secretary of finance and justice. The cost of the bullion so purchased shall be a proper charge against the gold-standard fund, and the money coined therefrom shall accrue to that fund.

SEC. 3. Whenever any contract, debt, or obligation, payable by the terms thereof in local currency, is sought to be enforced in any court and the right of the plaintiff is established, it shall be the duty of the court to render judgment for the plaintiff to recover as damages the lawful sum due to him, in Philippine pesos, instead of in the currency mentioned in the contract, debt, or obligation. For the purpose of determining the amount of such judgment, the court shall receive evidence as to the real and just value in Philippines currency of the currency named in the contract, debt, or obligatión, including evidence of the local market value of such currency, its value in neighboring countries as currency, its value in the great markets of the world, its bullion value, and any other facts necessary to determine its true value. The local market value, whether affected by the prohibition of the importation of such currency or by other causes, shall not be conclusive evidence of the amount of the judgment to be rendered in such cases. Payment of a judgment thus rendered shall extinguish all liability on the contract, debt, or obligation.

SEC. 4. Whenever any contract, debt, or obligation is made payable in local currency, the debtor or person under obligation to make payment may tender to the creditor in lieu of such currency the just amount due thereon in Philippine pesos, computed in the manner stated in the preceding section, and the effect of such tender shall be the same as though the tender had been made in the kind of currency named in such contract, debt, or obligation.

SEC. 5. The two last preceding sections shall apply to all contracts, debts, or obligations made before the passage of this act, as well as to those made subsequent thereto.

SEC. 6. Every check, note, draft, bond, bill of exchange, and every contract whatsoever, payable wholly or in part in local currency and

drawn or made upon, or subsequent to, October first, nineteen hundred and four, shall bear upon its face an internal-revenue stamp or stamps of a face value in Philippines currency to the amounts hereinafter provided, said stamp or stamps to be properly canceled at the signing of said check, note, draft, bond, bill of exchange, or contract with the initials of one of the parties thereto and the date of the transaction. The rates of the stamp tax required upon every check, note, draft, bond, bill of exchange, and upon every written contract whatsoever, payable wholly or in part in local currency, except as otherwise provided in this act, shall be as follows:

(1) An ad valorem rate of one per centum levied in Philippines currency upon the face value in local currency of each aforementioned instrument drawn or made during the month of October, nineteen hundred and four.

(2) An ad valorem rate of two per centum levied in Philippines currency upon the face value in local currency of each aforementioned instrument drawn or made during the month of November, nineteen hundred and four.

(3) An ad valorem rate of three per centum levied in Philippines currency upon the face value in local currency of each aforementioned instrument drawn or made during the month of December, nineteen hundred and four.

(4) An ad valorem rate of five per centum levied in Philippines currency upon the face value in local currency of each aforementioned instrument drawn or made subsequent to December thirty-first, nineteen hundred and four.

Provided, That the aforementioned tax shall not be collected upon the following:

(*a*) Checks, drafts, or bills of exchange drawn against a deposit of local currency and made payable to a person, firm, or corporation, or made payable to a bank and used in the purchase of a draft or bill of exchange payable to a person, firm, or corporation, in settlement either wholly or in part of a bona fide specific debt payable in local currency by the depositor and contracted in writing or reduced to writing prior to the first day of October, nineteen hundred and four.

(*b*) Checks, drafts, or bills of exchange payable in local currency and presented to a bank for deposit, payment, or sale by a creditor who has received the same in payment of a bona fide specific debt payable in local currency, contracted in writing or reduced to writing prior to the first day of October, nineteen hundred and four.

(*c*) Deposit receipts, or other evidences of deposits of local currency, given by a bank or other corporation or person to any person, firm, or corporation making a deposit of local currency, in accordance with the provisions of this Act, and for the purpose of providing funds for the payment of bona fide specific obligations payable in local currency and contracted in writing or reduced to writing prior to the first day of October, nineteen hundred and four.

(*d*) Checks, drafts, notes, bills of exchange, and contracts of any kind, the purpose and effect of which is the prompt shipment out of the Philippine Islands of the amount of Mexican currency the payment of which is called for in said check, draft, note, bill of exchange, or contract of any kind.

(*e*) Checks, drafts, notes, bills of exchange, and contracts of any kind, the purpose and effect of which is the prompt transfer of local

currency to the government of the Philippine Islands in accordance with the provisions of law.

(*f*) Contracts of any character whatsoever whose sole purpose and effect is the transference of a local-currency account to a Philippines-currency basis.

(*g*) Checks, drafts, or bills of exchange payable only in a foreign country.

SEC. 7. Every transfer of ownership by indorsement or otherwise after September thirtieth, nineteen hundred and four, of a check, draft, note, bond, bill of exchange, or any contract whatsoever, payable wholly or in part in local currency in the Philippine Islands after September thirtieth, nineteen hundred and four, except such instruments as are specified in subsections (*a*), (*b*), (*c*), (*d*), (*e*), (*f*), and (*g*) of section six, shall be considered a separate and distinct contract, and as such shall require a stamp or stamps.

SEC. 8. A tax of one per centum per month, payable quarterly, in Philippines currency, shall be levied upon the average daily balance of each deposit of local currency held after December thirty-first, nineteen hundred and four, by any bank, corporation, or individual receiving deposits in the Philippine Islands, and it shall be the duty of every bank, corporation, or individual receiving deposits in the Philippine Islands, which shall receive or continue local-currency deposits after December thirty-first, nineteen hundred and four, to furnish the collector of internal revenue, within ten days after the beginning of each quarter of the calendar year, a statement of the names and addresses of holders of local-currency deposits held by them during the preceding quarter, together with the average daily balance of each deposit, respectively, for each month of said quarter, and such other information as the collector of internal revenue shall require for the proper administration of this Act; and it shall be the further duty of such banks, corporations, or individuals to pay said tax to the collector of internal revenue within thirty days after the beginning of each quarter of the calendar year, deducting the amount of the tax from the depositor's account. The tax receipt of the collector of internal revenue shall be a sufficient voucher for the bank, corporation, or individual as to the proper use of the money, and shall be accepted by the depositor as money paid. Such average daily balance shall be calculated by adding together the sums of deposit to the credit of the depositor at the close of each business day in said month and dividing the sum so obtained by the number of days upon which said deposit was held: *Provided*, That any person wishing to maintain a local-currency deposit after December thirty-first, nineteen hundred and four, for the purpose of keeping funds for the payment at a future date of a bona fide specific local-currency obligation contracted in writing or reduced to writing prior to October first, nineteen hundred and four, may, by obtaining in advance the express permission in writing of the secretary of finance and justice, and having the same registered with the collector of internal revenue or his deputy, maintain such a deposit up to the time of the maturity of said local-currency obligation without paying the aforementioned tax.

SEC. 9. Every check, draft, note, bond, bill of exchange, and every contract whatsoever payable in local currency, and every deposit so payable shall be presumably subject to the taxes levied in accordance with the provisions of this act; and the obligation shall rest upon

the drawer or maker, holder or beneficiary, and, in case of transfer by indorsement, upon each indorser, indorsee, or holder of said check, draft, note, bond, bill of exchange, or bank deposit, who claims exemption, to prove that he is entitled to any of the exemptions provided in this act. No check, draft, note, bond, bill of exchange, or any contract whatsoever, payable in local currency, shall be exempted from the payment of the stamp tax provided for in sections six and seven of this act, unless the contract for which exemption is claimed shall be registered with the collector of internal revenue or his deputy before October first, nineteen hundred and four, and a certificate be attached thereto by the collector of internal revenue or his deputy certifying the exemption; and no deposit of local currency shall be exempted from the payment of the tax on bank deposits as provided in sections eight and nine of this act unless the exemption is obtained as herein provided, together with a certificate certifying the same, prior to January first, nineteen hundred and five.

SEC. 10. Every check, draft, note, bond, bill of exchange, and every contract whatsoever which is not properly stamped in accordance with the provisions of this act shall be void, and every person, firm, bank, or corporation who gives or receives such check, draft, note, bond, bill of exchange, or contract which is subject to the stamp tax under this act without its being properly stamped, or who shall receive or keep a deposit of local currency or make such a deposit without observing the provisions of this act, shall be guilty of a criminal offense, and shall be liable to a fine not exceeding the face value in Philippines currency of fifty per centum of the number of pesos of local currency called for in said check, draft, note, bond, bill of exchange, or contract, or of the deposit so kept.

SEC. 11. (*a*) All persons, firms, or corporations who engage in any business whatsoever in the Philippine Islands after December thirty-first, nineteen hundred and four, and make use of local currency to any extent whatever in either buying, selling, or renting goods, property, or services must, previously to engaging in such business and annually thereafter, in addition to the other licenses now required by law, obtain a license from the collector of internal revenue in the manner prescribed in the provisions of the industrial-tax law for the issuance of industrial licenses: *Provided*, That persons, firms, banks, or other corporations may deal in checks, drafts, notes, bonds, bills of exchange, and contracts which are mentioned in paragraphs (*a*), (*b*), (*c*), (*d*), (*e*), (*f*), and (*g*) of section six as not subject to a stamp tax, or may make such local-currency deposits as are exempted from taxation by section eight and nine without securing such a license: *And provided further*, That a bank, corporation, or individual may purchase local currency with the purpose and effect of promptly shipping said currency out of the country without securing such a license: *And provided further*, That the collection of accounts, debts, or other obligations made or incurred prior to January first, nineteen hundred and five, shall not be considered current business subject to the provisions of this section.

(*b*) The licenses shall be classified in accordance with the classification of rates of the industrial taxes, and the amount payable for a license of the first class shall be ten thousand pesos, Philippines currency; for a license of the second class, five thousand pesos, Philippines currency; for a license of the third class, one thousand pesos,

Philippines currency; and for a license of the fourth class, five hundred pesos, Philippines currency.

(*c*) Each separate factory, shop, store, or other business establishment, and each separate trade or business whether owned, managed, or carried on by the same or different persons, firms, or corporations, shall be considered for the purposes of this act a separate industry, and shall require for its legal conduct or management a separate license of the class provided for in this act. This section of this act shall be administered in accordance with the provisions of the industrial tax law so far as those provisions are not contrary to the provisions of this act.

(*d*) Any person, firm, or corporation who shall use local currency in the conduct of his business without a license and contrary to the provisions of this act shall be guilty of a criminal offense, and shall be subject to a fine of not exceeding ten per centum of the license fee required for his business, in addition to the payment of the license fee. Each separate transaction in local currency contrary to law shall constitute a separate offense and shall subject the offender to a separate fine of not exceeding ten per centum of the license fee.

SEC. 12. Immediately upon the passage of this act it shall be the duty of the chief of the division of the currency to prepare and have published in the principal languages and dialects of the Philippine Islands an announcement explaining the new Philippines currency, and the more important laws and official regulations pertaining to the use of that currency, and the methods provided for the withdrawal of local currency from circulation. Copies of this announcement shall be sent to all the provincial governors, provincial and municipal treasurers, presidents and municipal councilors of the Philippine Islands, and shall be posted and advertised as widely as possible throughout the Philippine Islands.

SEC. 13. This act shall be administered by the collector of internal revenue for the Philippine Islands.

SEC. 14. This act shall take effect on its passage.

Enacted, January 27, 1904.

5. FINANCIAL SECRETARY'S ORDER OF NOVEMBER 3, 1904.

Advise depositories in the United States of gold standard fund to sell demand drafts on the Philippine treasury at three-eighths of 1 per cent and telegraphic transfers at three-fourths of 1 per cent in sums not less than $5,000, rate temporarily fixed by secretary of finance and justice, in accordance with subsection 1 of section 7, act 938.

APPENDIX C.

PANAMA.

I. LAW PROPOSED IN PANAMA.

NATIONAL CONVENTION OF PANAMA—MONETARY QUESTION.

Project approved in the session of March 10, 1904:

That the order of the day be changed and the following substituted: That the project for a law on the monetary question be first discussed and then passed to a committee of this assembly, consisting of a deputy for each province, to examine the project and report upon it within fifteen days. Let the immediate publication of the project be ordered.

PROJECT OF A LAW RELATING TO MONEY.

The national convention of Panama decrees:

ARTICLE 1. The monetary unit of the Republic shall be the gold peso, of equal dimensions, weight, and alloy as the actual gold dollar of the United States of America, divisible in one hundred parts or cents.

ART. 2. The actual gold dollar of the United States of America and its multiples shall be legal tender in the Republic at their nominal value, equivalent to gold pesos.

ART. 3. In the event of their emission being considered convenient, the national gold coins shall be of 1, 5, 10, and 20 pesos, and of equal dimensions, weight, and alloy as the actual coins of the United States of America of the same value, expressed in dollars. The Executive shall determine the form and other details with regard to the coinage and emission of national gold coins.

ART. 4. The fractions of the national peso shall be of silver and of nickel.

ART. 5. The fractional silver coins shall be 900 millesimals fine, with 100 millesimals of copper alloy.

ART. 6. The value, weight, and diameter of the national silver coins shall be as follows: Coins of 50 cents shall weigh 25 grams and have a diameter of 37 millimeters, those of 25 cents shall weigh 12½ grams and be of 30 millimeters in diameter, 10-cent pieces shall weigh 5 grams and be of 23 millimeters diameter, and 5-cent pieces will weigh 2½ grams, with a diameter of 18 millimeters. The Executive shall determine the form and other details regarding the coinage and emission of national silver coins.

ART. 7. The national silver coins shall be legal tender at their nominal value in all transactions; but they shall not be coined in greater

quantity than is absolutely necessary for the conversion into national coin of the Colombian silver coin actually in circulation in the Republic, nor shall new emissions be made. Only the worn-out silver coins shall in future be recoined, or the coins of one class may be converted into coins of another class.

ART. 8. The Government of the Republic is obliged to maintain the par or equal value of the legal gold and silver coins, and the Executive is authorized to dictate provisionally—until the ordinary or extraordinary meeting of the Legislature—such measures as it may deem convenient for the maintenance of the national silver coin at its emission value.

ART. 9. The Colombian silver coins actually in circulation in the Republic shall be withdrawn and exchanged for new legal gold and silver coins at the rate of 225 pesos of Colombian money for 100 pesos of the new money.

ART. 10. During the conversion into national coin of the Colombian silver coin now in circulation in the Republic, they shall continue to be legal tender at the rate of exchange at which they will be converted; that is, at 225 per cent.

ART. 11. The Executive shall determine the time when the Colombian silver coins now in circulation shall cease to be legal tender, but in no case shall it be later than the 31st of December next. After the date to be fixed by the Executive the Colombian shall not be legal tender any more.

ART. 12. The obligations contracted before the enacting of the present law that are tacitly or expressly payable in Colombian silver coin (of 0.835 m. fine) shall be redeemable in national gold and silver coin at the before-expressed rate of 225 pesos of Colombian money for 100 pesos of the new money.

ART. 13. If the emission of nickel coins for fractions of a peso be deemed necessary, such coins shall be for the one-hundredth part of a peso; the amount to be struck not to exceed 30,000 pesos.

ART. 14. The national nickel coins shall be legal tender in all transactions to the amount of 5 cents, except in fiscal payments, in which they will be admitted to the amount of 5 per cent.

ART. 15. The expenditure occasioned by carrying out the present law shall be included in the budget of general expenses.

Given in Panama, the of March, 1904.

MARCH 11, 1904.

In to-day's session in first debate the preceding project was approved and passed in commission for the term of fifteen days to the honorable deputies Castulo Villamil, Sebastian Sucre J., Julio Teaza, N. Victoria J., J. Vasquez C., Demetrio H. Brid, and Luis Garcia F.

JUAN BRIN,
The Secretary of the Convention.

Is copy.

LADISLAC SOSA,
The Assistant Secretary.

2. FIRST MEMORANDUM OF THE AMERICAN COMMISSION.

Memorandum Regarding the Currency of Panama.

It is of great importance from the standpoint of economy in letting contracts for the construction of the Panama Canal and in securing justice between contractors and their employees that a sound currency system should be in operation on the Isthmus of Panama. It is important not only that the system should be sound in itself, but that it should give sufficient assurance of stability and permanence to permit contractors to calculate with certainty the cost of labor and materials on the Isthmus. Whether such a system exists or not will have much to do with determining the terms on which contractors will be willing to enter into engagements with the Canal Commission.

In order to secure stability it is desirable that the new system should repose upon the gold standard and that any coins or notes issued under such a system should represent fixed values in gold. This result may be attained in a variety of ways, as will be set forth hereafter. The contracts made by the Canal Commission will undoubtedly be made chiefly with citizens of the United States and in United States money. In determining, however, what charges to make to the Government for any given work to be performed on the Isthmus, contractors will necessarily be compelled to consider the state of the currency in which they must pay for labor. If they are left in uncertainty as to the currency with which they will be compelled to pay wages and buy materials, they will naturally insure themselves against loss by basing their estimates on the highest possible labor cost under any probable currency system. If after so doing they are able to pay wages in a depreciated or fluctuating currency, they will make the entire profit of the variations in such currency at the expense of the Government.

Aside from the loss to the Government which will grow out of uncertainty, the final employment of a fluctuating or depreciated currency on the Isthmus will inflict more or less injustice upon laborers and clerical employees, and the dissatisfaction felt by them may, by driving away the most competent men after a short stay, delay the work and deteriorate the character of the service, and thus react upon the Canal Commission itself.

It is very desirable, therefore, in order to avoid loss to the Government by paying contractors a premium for the risks of uncertainty in the monetary system and to secure economy and efficiency in construction that action should be taken at an early date to determine upon a sound system and to see that it is put in operation.

Another important object to be desired in the currency system in use by the Panama Canal Commision on the Isthmus is uniformity of values and units, if not of names, between the currency used in the Canal Zone and that used in Colon, Panama, and other parts of the Republic of Panama. This consideration is not sufficiently important to justify the use by the Commisison in the Zone of a defective currency, if such a defective currency is in use in Panama. If agreement could be reached, however, upon a sound system, it would conduce greatly to the convenience of laborers, clerks, and others connected with the construction of the canal to receive for their services a form of currency which was current in Colon and Panama and

which they could use there without paying for its exchange or submitting to a discount.

There are three chief policies among which a choice might be made in making disbursements on the Isthmus. There are other possible variations of these three policies, but consideration of these will be sufficient to illustrate the principles involved. These three policies are:

1. The adoption of United States currency as the sole legal tender in the Canal Zone and in Panama.

2. The adoption by the Government of Panama of a currency conforming in all respects to that of the United States, except its issue with special devices setting forth the sovereignty of the Government of Panama.

3. The adoption of a distinctive currency, intended to conform to the existing scale of wages and customs of the people of the Canal Zone.

I. The first suggestion—the adoption of United States currency as the sole legal tender in the transactions of the Commission and in the territory under its jurisdiction—would undoubtedly be acceptable to the American clerical force and to those dealing directly with the United States. It has the great merit also of conforming to the grand conception of the present Secretary of the Treasury, that the American dollar should everywhere be made the money of trade, carrying with it the prestige and power of the American name. Unless the United States money were also made sole legal tender in the Republic of Panama, however, the difficulties would be felt of lack of uniformity between the money used in the Canal Zone and that used in Colon and Panama, where much of it would undoubtedly be expended by those who received it, or exchanged for money which they could use. If the Government of Panama should adopt American currency as its national money, this difficulty would be overcome.

It would be necessary under this policy for the Panama Canal Commisison to transport to the Isthmus a sufficient quantity of United States currency to meet the demand for a circulating medium. It is probable that a much larger proportion of the money thus brought to the country would require to be in subsidiary silver than would be the case for an equal population in the United States. Sanitary reasons would argue against the general use of paper money, in spite of the vogue which it has had in the Republic of Colombia, outside Panama, in recent years. If, as reported, the average wages of labor in Panama are now 40 cents per day in depreciated silver, representing less than 20 cents in American gold coin, it is obvious that the transactions carried on by those who receive these wages must be chiefly in very small amounts. Where a laborer in the United States might find use for a $5 gold piece, representing the wages of one or two days, it would be less suitable to the requirements of a laborer whose daily wages were 20 cents, because for him a $5 gold piece would represent the earnings of twenty-five days of continuous labor, or practically a full calendar month. If American money were used, the silver pieces of 10 cents, 25 cents, and 50 cents would probably be in much greater demand than notes for $1 or gold coins of $5 or higher amounts. It is a question whether the present stock of subsidiary silver in the United States would not be unduly depleted by the shipment of a large amount to the Canal Zone. There

might then arise a demand for additional silver coinage by the United States, which many advocates of a sound currency there seriously deplore.

II. The second method suggested—the adoption of a currency by the Government of Panama based upon the same unit and standard of value as the currency of the United States—would create a harmony between the moneys of the Republic and of the Canal Zone which would in many respects be very convenient. It would involve, however, the issue by the Government of Panama of a considerable quantity of subsidiary silver to meet the demand for the payment of wages and other small transactions, unless notes for small amounts were issued. Either policy—the issue of large quantities of subsidiary silver or of small paper—would involve some risks to the stability of the currency unless carefully supervised. The coinage of silver pieces at the ratio of 16 to 1 when the bullion value of the pieces was less than half their face value would involve some danger of counterfeiting. More serious, perhaps, would be the danger of over-issues and of the lack of faith in some quarters that the silver would be maintained by the Government of Panama at par with gold.

It would probably be advisable to suggest to the Government of Panama, if such a measure is to be carried out, as reported in recent dispatches from there, that the silver coin issued should be protected by setting aside a gold reserve. This reserve might be derived from the payment about to be made by the Government of the United States to the Government of Panama. It is difficult to estimate the amount of currency which would be readily absorbed by the requirements of labor and business during the construction of the canal. Putting it, however, at the rather liberal figure of $10 per capita in United States currency for a population of 250,000, the amount required would be $2,500,000. If this were all issued in subsidiary silver, it should be protected by a reserve of not less than 25 per cent in gold, and perhaps more safely by a reserve of 35 to 40 per cent. The Government of Panama would indeed be able to set aside such a reserve without drawing upon the payment for the canal privilege by simply appropriating for the purpose the seigniorage upon the coinage issued. If, for instance, silver were purchased at 60 cents an ounce, and an ounce coined into $1.25 in money, the gold cost of the silver required for the coinage of $2,500,000 would be only $1,200,000, and there would be a profit to the Government of $1,300,000. It would be highly desirable that the whole or nearly the whole of this profit should be set aside as a guaranty fund for maintaining the parity of the silver money thus issued; and in order to afford a conspicuous guaranty to contractors and others interested that this fund was to be unimpaired, it would be advisable to deposit it in some bank of high reputation in New York or elsewhere outside the Republic of Panama.

III. The third suggestion—the adoption of a distinctive currency for the Canal Zone—is important in case the adoption of the American unit or standard should result in difficulties in regard to wages and prices. There is some reason to fear that if the American gold dollar were introduced where a lower unit had prevailed, whether this were done by the action of the United States in the introduction of their own currency, or by the Republic of Panama, there would be a disposition on the part of shopkeepers and trades to advance the prices of the articles in which they dealt by putting into dollars prices

previously expressed in depreciated silver pesos. They might make a nominal reduction by putting, for illustration, a price of 75 cents on an article formerly selling for a peso, but as the silver peso is now worth in gold less than half of the dollar, this would be in fact an increase of at least 50 per cent in the gold price of the article. The matter of retail prices would indeed adjust itself in time, and while it would cause more or less irritation and misunderstandings, need not perhaps concern seriously the Panama Canal Commission, if its effect went no further. The point at which the matter would deserve their serious consideration would be, whether such a policy would have a sufficient influence upon prices to increase the cost of living and thereby cause a demand for higher wages than those now paid in silver. If, for illustration, wages were 40 cents per day in silver, and through an advance in the cost of living it became necessary to put them at 30 cents in gold, this would be in fact an increase of 50 per cent in gold wages. The increase would indeed be somewhat more than 50 per cent, as silver bullion is now less than half its value at the old parity of 16 to 1, but the assumption that it has fallen one-half in gold value is sufficiently near the fact to afford a convenient means of illustration.

If wages should be advanced 50 per cent as the result of an error in the selection of a form of currency, it would mean a very serious enhancement in the cost of the construction of the canal. It is probable that an enhancement in the wages of labor will occur in any event, owing to the sudden demand for labor. If this rise in wages should offset the rise in retail prices caused by a change in the currency system, the net result would not be serious; but if, on the other hand, an advance in prices were caused by the sudden increase in demand for the products required by laborers, and a further increase in prices were superimposed upon this as the result of a change in the currency unit, the calculations based upon present prices for goods or for labor would be radically upset. These considerations, and all the uncertainties associated with them, will undoubtedly be weighed by careful contractors in submitting bids and entering upon contracts with the Canal Commission, and any step taken in advance to remove uncertainties will tend toward economy in the making of such contracts.

There is always the danger in introducing a new currency system that the more ignorant part of the population will distrust the new money and will refuse to receive it at its real gold value. This difficulty might be materially increased in the case of the people of the Canal Zone, by attempting to introduce a coin issued at the coinage ratio of 16 to 1 between gold and silver, and having, therefore, a value more than twice as great as the coins of the same size now in circulation in depreciated silver. Whether the persons receiving such coins would at once appreciate their real gold value, or would distrust pieces purporting to have a gold value more than twice as high as pieces of the same size in their old monetary system, is a question about which there is a difference of opinion and conflict of historical evidence. In some cases a change of this character has been readily accepted, although the cases are rare where so radical a difference between the face value of two coins of the same weight has been presented to a backward people. In other cases there has been the most stubborn

conservatism in accepting coins with new devices, even though of the same weight and value as the old.

In China the attempt at one time to introduce a new mintage of Mexican dollars largely failed through the fact that the average Chinaman was accustomed to the dollar with the old device of the rising sun and would accept no other. In portions of Africa the natives were so long wedded to a form of dollar coined in the time of Maria Theresa, that for many years after the death of this Empress coins of the same device were struck off for their special use. In these cases, moreover, there was not the difference in the value between the old coins and the new of the same size which would arise in Panama if the attempt were to be now made to substitute for the depreciated silver of the Republic of Colombia the higher-rated pieces of the Republic of the United States.

Whether the one system or the other referred to in this memorandum would be most acceptable to the people of the Republic of Panama and would result in the greatest economy to the Panama Canal Commission in making contracts depends to a large extent upon the temper of the community, the willingness of the Government of Panama to adopt a monetary system with sufficient guarantees of soundness to afford absolute assurance of its permanence to those who will do business there during the period of the construction of the canal, and to the influence which the United States will be able to exercise through their officials, open the maintenance of a sound and strong monetary policy by the Republic of Panama. If the difficulties of transition to the unit of the United States currency have already been surmounted, and wages and prices are becoming adapted to this unit, then the solution of making contracts and paying wages in American currency may prove to be at once the most simple, secure, and satisfactory.

If the Government of Panama is disposed to take this question up with full appreciation of the importance of introducing a stable currency throughout the Republic and giving adequate guaranties of its maintenance, it might be advisable for the Government of the Republic to appoint a commission of one or more persons familiar with the subject to come to the United States and confer with the officials of the Treasury and members of the Commission on International Exchange in regard to the adoption of such a system. Such a commission would necessarily be possessed of exact data regarding the present monetary system, and would have opinions of value in regard to the facility with which a change of unit and of standard could be introduced among the people of the Republic and of the Canal Zone.

NEW YORK, *March 26, 1904.*

3. PRESS REPORTS OF NEGOTIATIONS.

PANAMA CURRENCY PROBLEM—SECRETARY HAY TO URGE ADOPTION OF UNITED STATES GOLD STANDARD.

[From the Journal of Commerce and Commercial Bulletin, New York, Monday, June 6, 1904.]

WASHINGTON, *June 4.*

Admiral Walker, president of the Panama Canal Commission, had a long conference to-day at the War Department with Secretary Taft, and Mr. Taft afterwards talked with Secretary Hay about the unsatisfactory financial conditions on the Isthmus. To protect the vast army of laborers who will dig the canal

and live indiscriminately in the Canal Zone and in Panama from the evil effects of a fluctuating and depreciated currency, the United States Government regards it as essential that there shall be a sound money medium employed in Panama, and that it shall correspond as closely as possible with the United States standards. The adoption by the Panamans of a gold standard, therefore, is regarded as necessary.

The Panama Government has been wrestling with the problem for months, and to-day a cable dispatch was received from Mr. Lee, the United States chargé at Panama, stating that the gold-standard bill had been defeated by a deadlock in the legislature. He added that a call had been issued for a national convention, which it is expected will consider and finally pass upon the currency question, with which, it is now evident, the Panama executive branch, even aided by the legislature, is unable to deal.

The whole subject was discussed by the Secretary and Admiral Walker in the light of this last action by the Panama authorities, and Secretary Hay promised that the State Department, through its proper agencies, would undertake to influence the Panamans to adopt a sound currency system. John Barrett, the minister to Panama, will hasten, accordingly, to the Isthmus to aid in solving this problem.

PANAMA MUST KEEP RESERVE—GOLD BASIS FOR ISTHMIAN CURRENCY INSISTED UPON—TAFT TELLS THE REPUBLIC'S COMMISSIONERS THAT THE STABILITY OF THE SILVER COINS WHICH WILL BE CIRCULATED IN THE CANAL ZONE MUST BE EFFECTIVELY MAINTAINED.

[From The Sun, Sunday, June 12, 1904.]

WASHINGTON, *June 11.*

Another meeting was held to-day in Secretary Taft's office by the representatives of the United States and the Panama governments, who are endeavoring to reach an agreement on a plan for an interchangeable monetary system between the Republic of Panama and the Canal Zone.

Those present were Secretary Taft; Señores Arias and Morales, the special commissioners to Panama; John Barrett, United States minister to Panama; Rear-Admiral Walker, chairman of the Panama Canal Commission; Colonel Edwards and Judge Magoon, of the Bureau of Insular Affairs; Charles A. Conant, treasurer of the Morton Trust Company of New York, and Señor Arosemena, chargé d'affaires of Panama in Washington.

Secretary Taft again emphasized the necessity of the adoption of a stable currency system for the Canal Zone and the Republic, holding that whatever system was adopted must be satisfactory to the United States. In answer to his remarks the special commissioners from Panama produced a bill providing a new currency system for the Republic, which failed through a tie vote to pass its third reading in the Panama Congress.

In general terms the bill undertook to give the Republic a monetary system somewhat similar to that of the United States. It recognized the American gold dollar as legal tender and as standard of values, but provided also for the issue of a large amount of subsidiary silver at the ratio of 32 to 1, the same ratio established in the Philippines.

Secretay Taft made it clear that no currency system, providing, as was necessary, for a very large use of silver in the Republic and the Canal Zone would be satisfactory to the United States, unless there were an ample gold reserve in the Panama treasury to preserve the parity between gold and silver.

In answer to questions whether this gold reserve could be furnished by the Panama Government, the commissioners of the Republic explained that $3,000,000 of the bonus paid by the United States to Panama was to be used for running expenses, $4,000,000 for the construction of important public works, and the remaining $3,000,000 was to be deposited where it would draw interest.

The commissioners were asked how much subsidiary silver was now in circulation in the Republic, but they were unable to tell, or to say what amount of gold reserve would be necessary to preserve its parity. This silver was coined by the Columbian Government, and under the provisions of the act which failed of passage in the Panama Congress was to be redeemed and recoined, and no more Colombian currency permitted to circulate in Panama.

Mr. Taft and the other American representatives expressed the hope that Panama would be able and willing to provide a sufficient gold reserve, and showed the Republic's commissioners that the Administration was determined that some such arrangement to insure the stability of silver coinage should be adopted before it would consent to allow the circulation of Panama money in the Canal Zone.

The Republic's commissioners were unable to give any assurance that their Government would provide a gold reserve, but they promised to endeavor to ascertain the wishes and intentions of the Isthmian authorities in the matter.

The conferees adjourned until next Saturday in order to give them an opportunity of doing so. The Panama commissioners will also inform the American representatives of the amount of Colombian subsidiary silver in circulation in Panama.

It is probable that at the meeting a week hence Secretary Taft and his associates will submit a proposition that the Panama Government provide a gold reserve sufficient to insure the stability of the Colombian silver money now in circulation on the Isthmus, and make additions to the reserve as rapidly as new coins are issued.

PLANS FOR PANAMA CURRENCY CONCLUDED—WILL BE SUBMITTED TO LEGISLATURE FOR RATIFICATION—WAR DEPARTMENT MAKES OFFICIAL STATEMENT—UNITED STATES GOLD CURRENCY TO BE LEGAL TENDER IN REPUBLIC OF PANAMA—ADDITIONAL DETAILS OF PROPOSED SYSTEM

[From the Journal of Commerce and Commercial Bulletin, New York, Tuesday, June 21, 1904.]

WASHINGTON, *June 20.*

Secretary Taft and the commissioners for Panama to-day concluded arrangements for a currency system for Panama which is to be submitted to the Panama legislature for ratification. The plan already has been outlined in these dispatches. It provides generally for a sufficiently reserved bimetallic system.

The following official statement was given at the War Department to-day:

"An agreement was reached to-day at the War Department between Secretary Taft and the Panama commissioners, by which the gold currency of the United States shall be the legal tender in the Republic

of Panama, and the money of Panama shall be legal tender in the Canal Zone.

This agreement will be transmitted by the Panama commissioners to their Government, and if adopted by the constitutional convention will settle the question of the currency to be used in the construction of the canal. The substance of the agreement is that a gold dollar of the same value as that of the United States shall be the standard of value in Panama, and that the gold currency of the United States shall be legal tender there, with provision for the issue of fractional silver currency of the Republic of Panama. It is provided that such silver currency shall be coined to an amount in nominal value of $1,500,000 in gold: the silver to be obtained by the recoinage of Colombian coins now in circulation on the Isthmus, and that at the option of the Canal Commission, if the construction of the canal shall show such coinage to be necessary, there shall be an additional coinage of fractional silver to the amount of $1,500,000. The parity of all the silver coined shall be maintained by the deposit in some bank in the United States of 15 per cent of the nominal value of such fractional currency and the net seigniorage on the amount coined at the request of the Canal Commission. In order to prevent the manipulation of exchange at the expense of the public and canal works, the Republic and the Commission agree to cooperate by the sale of drafts at reasonable rates to keep down the exchange on New York and thus prevent a disturbance of the parity."

4. PROJECT OF THE AMERICAN COMMISSION.

SUGGESTIONS REGARDING THE SYSTEM OF CURRENCY TO BE USED IN THE PANAMA CANAL ZONE.

[Submitted by Hugh H. Hanna and Charles A. Conant, of the Commission on International Exchange.]

The essential conditions of a sound currency in the Panama Canal Zone are similar to those in the United States—stability of value in the standard, certainty that this stability will be maintained, and conformity to local needs. A fourth requirement may be added in regard to the Canal Zone—that the currency there used should be the same, if practicable, as that used in the chief cities of the Panama Republic, Panama and Colon.

Stability of the currency system in its relation to gold is important for several reasons. One is that it may be possible for contracts to be made by the Panama Canal Commission without paying a premium to contractors to cover the risk of fluctuations in the money employed in the Isthmus. Another is, that a stable standard will tend to prevent the injustice to laborers employed on the canal and to clerks in the service of contractors and the Canal Commission which would result from paying them in a money which was liable to fluctuate in gold value.

The contracts made by the Canal Commission will undoubtedly be made chiefly with citizens of the United States and in United States money. In determining, however, what charges to make to the Government for any given work to be performed, contractors will necessarily be compelled to consider the state of the currency in which they must buy materials and pay for labor. If they are left in uncertainty on this point, they will naturally insure themselves against loss by

basing their estimates on the highest possible labor cost under any probable currency system. If, after so doing, they are able to pay wages in a depreciated or fluctuating currency, they will make the entire profit of the variations in such currency at the expense of the Government.

Aside from the loss to the Government which will grow out of uncertainty, the final employment of a fluctuating or depreciated currency on the Isthmus will inflict more or less injustice upon laborers and clerical employees, and the dissatisfaction felt by them may, by driving away the most competent men after a short stay, delay the work and deteriorate the character of the service and thus react upon the Canal Commission itself. It is very desirable, therefore, in order to avoid loss to the Government and to secure economy and efficiency in construction, that action should be taken at an early date to determine upon a sound system and to see that it is put in operation.

CHARACTER OF THE ECONOMIC PROBLEM.

Before proceeding to discuss details of a plan for maintaining a suitable currency in the Canal Zone, it may be well to point out the character of the economic problem to be dealt with. This problem is primarily the transfer of capital from the United States to Panama. Assuming, for the sake of illustration, that the cost of the canal will be $100,000,000, this amount of capital has to be transferred in some form from the United States to the Canal Zone. The one deduction to be made from the amount to be thus transferred would be the profits of contractors. Contractors who are American citizens will probably desire payment largely in the United States and in United States currency. The proceeds of what they actually expend, however (excepting profits of persons from whom they buy materials and machinery in the United States), will be transferred to Panama. This transfer will be made in three forms—machinery, materials of construction, and food and supplies for laborers.

While the contractors themselves may not directly transfer food and supplies for laborers, but will pay the latter in currency in the Canal Zone, some persons in the United States and in the countries adjacent to Panama will send food, clothing, and other necessaries to the Isthmus and will receive their compensation outside of Panama in currency or in various forms of capital acceptable to themselves.

The problem in relation to the currency is not a problem of transferring to the Isthmus $150,000,000 in currency, or even so much as a tenth part of that sum. The currency required on the Isthmus will be only such as is necessary to meet the demands of a single week or month, and will be constantly passed from hand to hand to facilitate the movements of other forms of capital. If, for illustration, 50,000 laborers were paid 10 pesos per week, the amount required for the weekly pay roll would be 500,000 pesos. A large part of the amount so disbursed would flow through the hands of local shopkeepers into the banks, and would afford a means to the bankers for buying exchange on New York. If there were no hoarding by anyone, so that the entire amount disbursed at the end of one week found its way back into the banks before the end of the following week, then the amount of currency required for paying wages throughout the period of the canal construction would be the amount set forth—500,000 pesos.

In view of the fact, however, that in addition to the existing need for currency in Panama, business generally will be increased in volume, that money will be held by banks, shopkeepers, and boarding-house keepers, and that some hoarding will undoubtedly take place among the laborers, the amount of currency required will be several times the amount of the pay roll for a single week. It is probable, however, that if the population of Panama and the Canal Zone, now estimated at 250,000, should be increased by the requirements of the canal work to 350,000, a circulation of 20 pesos per capita, or 7,000,000 pesos (amounting to \$3,500,000 gold) would be found sufficient. It is not necessary now to determine the exact amount, for that would be regulated by a process more or less automatic, which will be hereafter set forth. It is only necessary to point out that the amount of currency required would, on the one hand, be only a small fraction of the capital to be invested in the canal, and, on the other hand, would require to be several times the amount needed to pay wages at any given moment.

THE MONETARY PROBLEM TO BE DEALT WITH.

What, then, is the nature of the monetary problem to be dealt with in providing an acceptable currency in the Canal Zone? It might be suggested that if the United States currency were made the sole legal tender it would meet requirements. There are, however, several strong objections to this policy. Several of them may be summed up thus:

(1) Absence of uniformity between the money of the Canal Zone and that of Panama.

(2) Lack of adaptability of United States currency to the present standard of wages and prices on the Isthmus.

(3) Danger of counterfeiting.

If agreement can be reached between the Panama Canal Commission and the Republic of Panama by which the money employed in one jurisdiction can be used interchangeably in the other, it will obviate many difficulties on the part of contractors, laborers, and other employees. Much of the money received by clerks and laborers in the Canal Zone will undoubtedly be expended in Colon and Panama. These persons would be subject to a hardship, which should, if possible, be avoided, if they were compelled to pay exchange upon the money used whenever they passed from one jurisdiction to the other. Even if the use of United States money became so common in Panama and Colon as to make it acceptable to shopkeepers, or the money of Panama became equally common in the Canal Zone, without some agreement for the mutual legal tender and a definite ratio between the two forms of money, there would be discrimination made in receiving one money in the jurisdiction of the other which would probably amount in effect, if not in form, to a charge for exchange. It would be inadvisable, even in order to secure uniformity, for the United States to consent to the employment of a depreciated and fluctuating money in the Canal Zone. But if an agreement could be made for the use of a stable and convenient form of currency in both jurisdiction, it would contribute greatly to the convenience and contentment of those engaged in the canal work.

A HIGH UNIT ILL ADAPTED TO LOCAL CONDITIONS.

The most important objection perhaps to the employment of United States currency as the sole legal tender in the Canal Zone is the fact that it would establish a unit of value very different from the present unit, and therefore ill adapted to local conditions. The adoption of such a high unit as the gold dollar where the silver peso has heretofore been the unit, worth in the neighborhood of 45 cents gold, would require a readjustment of prices and wages which would probably tend to raise prices in gold. As a consequence of the rise of prices the real earnings of the laborer would be diminished, or the Panama Canal Commission would be compelled to pay much higher gold wages than would otherwise be required. If $75,000,000 would be normally required for wages during the construction of the canal and a change of standard should cause an advance of one-third in gold wages, this item alone would add $25,000,000 to the cost of the canal. This enhanced cost, moreover, would not go chiefly to the laborers who received the enhanced gold wages, but would pass through their hands to shopkeepers, boarding-house keepers, and the conductors of various resorts, who had raised their prices to conform to the new monetary standard.

Still further difficulty would arise in dealing with the wage question from the peculiar character of the silver coinage of the United States, issued at the ratio of 16 to 1, when the existing commercial value of silver is nearer the ratio of 35 to 1. The present silver coinage in use in Panama conforms to the value of silver bullion. A monetary system which recognized in some degree the present value of silver, even though the new coins were given a fixed value in gold, would tend to make the transition easy and unobserved from the existing silver standard to a stable gold standard. Under the system of making United States currency the sole legal tender and medium of exchange, if wages and prices remained substantially unchanged, the laborer and shopkeeper would receive for a given gold value a coin only half the size of that which he now receives. There would probably be difficulty in persuading the more ignorant that an American 25-cent piece represented a higher exchange value than a piece of 50 centavos, twice as large, of the old coinage.

Even if the intellectual operation were easy, of grasping the unity of value between two coins so different in size, the difficulty would still remain that the new coins would be much less adapted to small transactions than a system which permitted the use of larger coins for the same amount. If the wages of labor were a peso a day, it is obvious that many of the expenditures made by the laborers for food and other articles would represent very small amounts. If for a peso were substituted an American half dollar, the subdivisions would be less easy to deal with than the subdivisions of a peso, issued at about the ratio of 32 to 1, with the half-peso, 20-centavo, 10-centavo, 5-centavo, and 1-centavo pieces as subsidiary minor coins.

Whatever standard is adopted in Panama and on the Canal Zone, even if American money is made the sole legal tender, a low scale of wages will necessarily require that a large proportion of the currency actually in use shall be subsidiary silver. Where a laborer in the United States might find use for a $5 gold piece, representing the wages of one or two days, it would be less suitable to the require-

ments of a laborer whose daily wages were 50 or 60 cents, because for him a $5 gold piece would represent the earnings of ten days of continuous labor, or nearly half of a calendar month. If American money were used, the silver pieces of 10 cents, 25 cents, and 50 cents would probably be in much greater demand than notes for $1 or gold coins of $5 or higher amounts.

The danger of counterfeiting would be serious under a system which gave silver coin an exchange value more than 100 per cent in excess of their value as bullion. While this danger could be guarded against more or less effectively by careful police regulations, the possibility of a profit of more than 100 per cent would hold out a constant temptation for the fraudulent fabrication of coins in all the surrounding countries, and even in distant countries, for importation into the Republic of Panama and the Canal Zone. It should be borne in mind also that however strict might be the police supervision in the Canal Zone, it could not be extended to the territory of Panama without the consent of the Government of the Republic.

PRINCIPLES OF A PLAN RECOMMENDED.

In view of these considerations it is suggested that the following principles of a currency system be recommended by the Government of the United States to the Republic of Panama for mutual adoption in that Republic and in the Canal Zone:

(1) That United States gold and paper currency be made legal tender in Panama and in the Canal Zone for debts contracted in such currency or the currency herein provided for, but that the importation of American silver and minor coins be prohibited.

(2) That a standard silver coin be issued by the Government of Panama in accordance with the bill recently pending in the Congress of Panama providing for a peso of the weight of 25 grains and having the value of 50 cents in American gold coin, with corresponding subsidiary and minor coins.

(3) That the silver peso herein provided for be legal tender for debts in Panama without limit in amount, unless some other currency is expressly stipulated in the contract.

(4) That in order to guarantee the parity of the silver coins issued under this plan, the Government of Panama shall set aside a part of the amount paid by the United States for the canal franchise, not less than $1,500,000, which fund shall be deposited in some banking institution in New York or placed in trust in the hands of a syndicate or committee of bankers, with the approval of the Secretary of War of the United States.

(5) That arrangements shall be made between the Government of Panama and the Panama Canal Commission for selling at reasonable rates and on such terms as will tend to maintain the parity of the silver coins of Panama, drafts upon the reserve fund set aside under the previous paragraph and upon the funds of the Panama Canal Commission in the United States.

(6) That if the previous suggestions are complied with in a manner acceptable to the Secretary of War of the United States the Panama Canal Commission may authorize the employment of the currency of Panama in the Canal Zone, and shall employ it in disbursements so far as they find it practicable and convenient, reserv-

ing the right to limit the amount for which it may be made legal tender.

(7) That the Government of Panama shall consult with the Panama Canal Commission in regard to the amount of coinage required in the Canal Zone, with a view to keeping the amount within the requirements of actual transactions.

(8) That the coinage to be issued under this project shall be executed for the Government of Panama at the mints of the United States.

OPERATION OF THE PLAN PROPOSED.

This plan corresponds in principle with measures which are now before the Government of Panama. It is a plan which makes it possible for the Republic of Panama to adopt a sound and stable currency based upon the gold standard, but with a subsidiary coinage adapted to local conditions. It places upon the Republic the ultimate responsibility for establishing and maintaining the system, but leaves to the Panama Canal Commission the means of escaping any of the evils which might result from failure on the part of the Government of Panama to carry out fully the measures for maintaining parity of its currency.

The plan contemplates that the Republic of Panama shall adopt the gold standard on the model of the United States, either by adopting a gold dollar of its own of the same size and fineness as ours or by making that of the United States legal tender throughout the Republic. In order to avoid confusion between the silver coins of the Republic and of the United States it is suggested that the importation of American silver coin be prohibited, and that those of the Republic of Panama be employed in all disbursements of silver required by the Panama Canal Commission. In case, however, there is any failure on the part of the Government of Panama to maintain the stability of its currency it will then be in the power of the Panama Canal Commission to limit the amount for which the silver coins of Panama shall be legal tender within the Canal Zone. Such a policy might be pursued tentatively if no marked depreciation appeared in the coins of Panama, while if such depreciation became serious it would then be in the power of the Panama Canal Commission to introduce American currency freely for all purposes.

As all contracts would probably be made in American currency, with the understanding that in small payments the Panama peso was to be equal to one-half of the American dollar, no disturbance of legal obligations would occur if it became necessary to abandon the use of the currency of Panama. If such a contingency should arise, the government of the Canal Zone would be able to consider the question of issuing its own subsidiary silver upon the same basis as that here recommended for the Republic of Panama. It is probable, however, that by proper consultations between the Canal Commissioners and the Government of Panama measures would be taken by that Republic to promote the interests of its own citizens and the commerce of its chief cities by the adoption of a plan acceptable to the United States and by resolute measures to maintain the value of its currency.

It is important, if the Government of Panama is to give the assurance of stability to its currency system, that the quantity of silver

coins shall be kept strictly limited to the requirements of actual transactions, and that they shall be protected in some way by a gold reserve or a gold credit, which can be used for the redemption of the coins in case the issues become excessive. The ample resources already at the command of the Government of Panama for constituting a reserve would be further increased to some extent by the seigniorage on the silver coins issued. It would probably be prudent to set aside this seigniorage as a part of the guaranty fund for the maintenance of the stability of the currency. It is probable that the demand for currency will be considerably reduced when the construction of the canal is completed, after an interval of perhaps ten years. The necessity of providing for this contingency should be kept in mind in constituting a guaranty fund. There is no reason why such a fund should not draw interest while held in the custody of the banks in New York, so that its employment would not involve any material expense to the Government of Panama.

IMPORTANCE OF THE EXCHANGE PROBLEM.

The subject of exchange with New York will be a dominating factor of the situation on the Isthmus. This would be the case with any form of currency, because the remittances to and from New York by the Government, by contractors for canal work, and by purchasers of supplies for laborers will bear a proportion to the stock of currency which will be unusually large. If the amount expended on the canal is $15,000,000 per year, this would constitute an average expenditure of $1,250,000 per month. There would be no certainty, however, that the amount would be the same in each month. On the contrary, transactions might easily rise to $3,000,000 or $4,000,000 at some one time and exchange operations with New York be equally large. As this would be equal to 8,000,000 pesos, or more than the entire volume of currency on the isthmus (if the latter were put at 7,000,000 pesos), it is obvious that the fluctuations of exchange might be very radical if the matter were not carefully managed. The payment of local currency into the banks, moreover, for such a large amount of exchange might create sudden and radical changes in the volume of currency in circulation. It would be impossible to avert difficulties from this cause, with either a pure gold currency or a local currency, unless a policy of cooperation should be pursued in dealing with the matter. It will probably be necessary for the civil governor of the Canal Zone to consult with the local bankers and the Panama Government with a view to so distributing the Government operations to avert a famine in exchange and excessive rates at one time, with perhaps an excess of offers and a violent contraction of the local currency at other times.

As serious work upon the canal can not be begun for perhaps a year, pending the completion of surveys, the making of contracts, and the accumulation of machinery, there is sufficient time for the preparation of dies and the issues of a new coinage by the Republic of Panama if the plans for it are promptly perfected. It is highly desirable, however, that the policy to be pursued should be fixed at the earliest possible moment, in order that contractors in bidding for work may know the conditions under which they will have to pay for labor and supplies.

In view of the fact that a committee of representative citizens of Panama is about to visit the United States in regard to the investment of the money received for the canal franchise, it might be well to have this subject thoroughly discussed with this committee, with a view to an amicable arrangement which would enable the Government of Panama to adopt a monetary system of such a character that the currency issued could be employed with prudence and with satisfactory results in the Canal Zone.

MAY 19, 1904.

5. AGREEMENT BETWEEN THE SECRETARY OF WAR AND THE COMMISSION OF PANAMA.

WASHINGTON, *June 20, 1904.*

GENTLEMEN: I understand that there is now pending in the convention of the Republic of Panama, exercising legislative power for the Republic, a bill to establish a monetary standard and to provide for the coinage necessary in the Republic. The Isthmian Canal Commission, whose action, by direction of the President of the United States, I am authorized to supervise and direct, is vitally interested in the maintenance in the Canal Zone of a stable currency, based upon the gold standard.

I conceive it to be of common benefit to the Republic and to the Isthmian Canal Commission that the currency used in the Republic and in the Canal Zone should be the same. I am informed that the convention of the Republic has under consideration a measure which in substance provides:

I. That the monetary unit of the Republic shall be a gold peso, of the weight of 1 gram, 672 milligrams, and of nine hundred one-thousandth fineness, divisible into 100 cents, to be issued as and when considered by the Republic necessary or convenient for its requirements.

II. That the present gold dollar of the United States of America, and its multiples, shall also be legal tender in the Republic of Panama for its nominal value, as equivalent to 1 gold peso of the Republic.

III. That fractional silver coins shall be issued by the Republic, of various denominations, all to be of an alloy composed of nine hundred one-thousandth of pure silver and one hundred one-thousandth of copper, the declared value of the same bearing a ratio to the same weight of gold of approximately 1 to 32, and that such fractional silver currency shall be legal tender in all transactions.

IV. That the silver to be coined shall be in fractional denominations of the gold peso or dollar and, except as hereinafter specifically provided, shall be coined only in exchange or conversion of the Colombian silver peso and fractional currency now legally in circulation in the Republic, and that the amount thus converted shall not exceed $3,000,000 of such Colombian pesos.

V. That after July 1, 1905, there shall be coined and issued by the Republic such additional amount of fractional silver currency to the limit in the aggregate in value of 1,500,000 pesos or gold dollars, equivalent to 3,000,000 half-dollar pieces, as may be deemed by the Secretary of War of the United States necessary or advisable in the construction of the Isthmian Canal and as may be requested by him of the Executive power of the Republic.

VI. The Republic of Panama, in order to secure the legal parity and equivalence with the gold standard of such fractional silver coins, shall create a reserve fund by deposit with a responsible banking institution in the United States, of a sum in lawful currency of the United States equivalent to 15 per cent of the nominal value of the silver fractional currency issued by the Republic, and as the same is issued, together with an amount equal to the seigniorage on the silver coins issued at the request of the Secretary of War as aforesaid, less all necessary costs of coinage and transportation.

VII. That after conference with the Isthmian Canal Commission, or its representatives or fiscal agents, the Republic of Panama will take such steps with respect to exchange by drafts upon its reserve fund as will tend to prevent the disturbance of the legal parity of the silver fractional currency of the Republic of Panama with the gold standard.

VIII. That the Republic of Panama shall cause its coinage to be executed at the mints of the United States.

Assuming that legislation will be enacted substantially to the foregoing effect, I agree, on behalf of the Isthmian Canal Commission and by direction of the President of the United States:

First. That the Isthmian Canal Commission will make the gold and silver coin of the Republic of Panama legal tender within the Canal Zone by appropriate legislation.

Second. That it will employ such gold and silver coin of the Republic in its disbursements in the Canal Zone and in the Republic as the Canal Commission shall find practicable and convenient.

Third. The Isthmian Canal Commission shall cooperate with the Republic of Panama to maintain the parity of the fractional silver coinage of the Republic of Panama with the gold standard by sale of drafts upon its funds at reasonable rates and on terms which will tend to prevent the disturbance of such parity.

Fourth. It is mutually agreed that nothing herein contained shall be construed to restrict the right of the Republic to reduce its silver currency after the opening of the canal to commerce to such an amount as it may deem advisable, and thereupon to reduce and withdraw, pro rata, the reserve fund corresponding to the reduction of the amount of silver coinage outstanding.

Will you please confirm your accord with the foregoing?

Very respectfully,

Wm. H. Taft,
Secretary of War.

Messrs. Ricardo Arias and Eusebio A. Morales,
Special Fiscal Commissioners of the Republic of Panama.

Special Fiscal Commission of Republic of Panama,
New York, June 20, 1904.

Sir: Pursuant to the powers conferred upon us by the general directions of the Government of the Republic of Panama and subject to the enactment by the Republic of the necessary legislation, we

hereby declare our complete accord with the convention embodied in your communication of this date and agree to the same as therein set forth.

We are, dear sir, very truly, yours,

RICARDO ARIAS,
EUSEBIO A. MORALES,
Special Fiscal Commissioners of the Republic of Panama.

Hon. WM. H. TAFT,
Secretary of War, Washington, D. C.

6. ACT OF PANAMA IN PURSUANCE OF AGREEMENT.

LAW NO. 84—1904 (OF JUNE 28) ON CURRENCY.

The National Convention of Panama decrees:

ARTICLE 1. The monetary unit of the Republic shall be the balboa; that is, a gold coin of 1 gram six hundred and seventy-two milligrams (1.672) in weight and of nine hundred thousandths (.0900) fine, divisible into one hundred hundredths (100/100).

Paragraph. The present gold dollar of the United States of America and its multiples shall be legal tender in the Republic at their nominal value equivalent to a balboa.

ART. 2. When the executive power provides for the coinage of national coins of gold, this coinage may be made in pieces of one, of two and one-half, of five, of ten, or of twenty balboas, choosing the one or more of greatest circulation in trade.

ART. 3. Silver coins shall have an alloy of nine hundred thousandths of pure silver and one hundred thousandths of copper.

ART. 4. The nomenclature, weight, diameter, and equivalent value of the silver coins shall be the following:

The peso.—A coin which shall weigh twenty-five (25) grams, which shall have a diameter of thirty-six millimeters, and which shall be equivalent to fifty one-hundredths (50/100) of a balboa.

The half peso.—A coin which shall weigh twelve and one-half grams (12½ gr.), which shall have a diameter of thirty (30) millimeters, and which shall be equivalent to twenty-five one-hundredths (25/100) of a balboa.

The one-fifth peso.—A coin which shall weigh five grams (5 gr.), which shall have a diameter of twenty-four millimeters, and which shall be equivalent to ten one-hundredths of a balboa.

The one-tenth peso.—A coin which shall weigh two and one-half (2½) grams, which shall have a diameter of eighteen (18) millimeters, and shall be equivalent to five one-hundredths (5/100) of a balboa.

The one-twentieth peso.—A coin which shall weigh one and one-half grams (1½ gr.), which shall have a diameter of ten (10) millimeters, and which shall be equivalent to two and one-half one-hundredths of a balboa.

Paragraph. Consequently, two pesos of silver shall be equivalent to one balboa, which is the monetary unit. The other fractions of a peso shall bear the same equivalent fractional proportion to the said unit.

ART. 5. National silver coins shall be legal tender at their nominal value in all transactions.

Art. 6. Colombian silver coins of a standard not inferior to 835 thousandths fine and 666 thousandths of the same alloy, which are now in circulation in the Republic, shall be exchanged for the new national coins at the rate of $212.50 for each one hundred (100) balboas or their equivalent in Panamanian silver coin. But the conversion of Colombian silver coin of the standard of 666 thousandths shall be limited to pieces of five centavos and to the amount of 20,000 pesos only, provided by the first clause of contract No. 36, entered into by the government of the old Department of Panama, in the name of the National Government of the Republic of Colombia, with Messrs. Isaac Brandon & Bros., merchants in this city, for the coining of Colombian silver money, which contract was approved by Gen. Victor M. Salazar, civil and military chief of the then Department of Panama, under date of October 10, 1902, and was published in No. 1399 of the Gazette of Panama of October 9 of the same year.

Paragraph. Obligations contracted before this law goes into effect payable tacitly or expressly in Colombian silver coin of a standard not inferior to (0.0835) eight hundred and thirty-five one-thousandths shall be redeemable in the new national coin at the rate stated in this article.

Art. 7. The Colombian silver coins of which this law speaks shall continue to be legal tender until the date on which the redemption of them begins to be made, and from that day forth they shall have the value which is herein assigned them for redemption.

The executive power shall begin the conversion of the coin mentioned in article 6 on the first day of September next. For the purpose he shall designate the public offices which, in the capital and provinces of the Republic, are to make the exchange, and shall give notice thereof thirty days before the day fixed. The conversion shall take effet within sixty days following the date mentioned, after which Colombian coin shall cease to be legal tender in the Republic.

Art. 8. For the purpose of carying out the exchange of the silver money now in circulation in the Republic, the executive power is authorized to have coined and issued not more than the amount of three million (3,000,000) pesos, Panamanian money, as this law provides.

Art. 9. To guarantee parity of the silver legal-tender money with that of gold the executive power shall deposit with a responsible banking institution of the United States a sum in gold equal to fifteen per centum of the issue.

Art. 10. The executive power shall give account by monthly statements, published in the Official Gazette, of the amounts which he receives of Colombian and silver coin for the purpose of conversion; and when this is concluded he is authorized to sell the money which is collected in any of the foreign mercantile markets at the rate which is best for the interests of the treasury. The proceeds of this sale shall be paid into the general treasury of the Republic.

Art. 11. The stamp of the Panama coins to which this law refers shall be the following:

For the obverse the bust of Vasco Nunes de Balboa, discoverer of the Panama coast on the Pacific Ocean, in profile, looking to the right, with a head-band on which are engraved the words "Dios," "Ley," "Libertad." Around the head at the edge of the coin the phrase

"Republica de Panama;" on the base of the bust the word "Balboa" in capital letters, but of smaller size than the other inscriptions.

On the lower part of the coin, below the bust, the year of coining in figures.

Upon the reverse the coat of arms of the Republic of Panama in the center.

Around the upper part the value of the coin in words.

Around the lower part, to the right, the weight of the coin in grams; on the left the proportion of alloy in thousandths fine.

ART. 12. The introduction into the territory of the Republic of any sort of silver coin except that which the executive power imports for the fulfillment of this law is absolutely prohibited.

ART. 13. The executive power is authorized to enter into a monetary convention with the Government of the United States of North America, in which the present law and the convention signed at the conference in Washington on the 18th day of the present month of June, between the commissioners of that Government and that of the Republic of Panama, shall be taken as a basis.

ART. 14. The expense which the execution of this law occasions shall be considered included in the budget of expenses.

Given at Panama the 27th day of June, one thousand nine hundred and four.

The President,
(Signed) GERARDO ORTEGA.
The Secretary,
(Signed) LADISLAO SOSA.

NATIONAL EXECUTIVE POWER,
DEPARTMENT OF HACIENDA.

Let it be published and executed.
Panama, June 28, 1904.
(Signed) M. AMADOR GUERRERO.
The secretary of hacienda,
(Signed) F. V. DE LA ESPRIELLA.
A copy.
The subsecretary of hacienda,
F. MARTIN FEUILLET.

Appendix D.

MEXICO.

I. FINAL RECOMMENDATIONS AND REPORTS OF THE COMMISSION APPOINTED BY THE GOVERNMENT OF THE REPUBLIC TO INVESTIGATE THE MONETARY PROBLEM.

MONETARY REFORM IN MEXICO—DEFINITE PLANS ARE FORMED TO PUT THE CURRENCY OF THE COUNTRY ON A STABLE BASIS AND TO SECURE FIXITY IN THE RATES OF INTERNATIONAL EXCHANGE.

On February 4, 1903, the department of finance appointed a commission of bankers, economists, business men, mine owners, and others to study Mexico's monetary problem in all its phases.

That commission held its first meeting on February 19, 1903, when an address was delivered by Lic. José Yves Limantour, minister of finance, outlining the labors that awaited the commission and explaining the nature of the assistance which the Government desired from it.

At the same session the commission organized itself. Lic. Pablo Macedo was appointed chairman; Enrique C. Creel, vice-chairman; Lic. Luis G. Labastida, secretary, and Lic. Jaime Gurza, assistant secretary.

The commission also divided itself into four subcommittees, each encharged with the study of a given phase of the monetary question. The chairmen and secretaries of the subcommittees in question were as follows:

First subcommittee: Chairman, Lic. Genaro Raigosa; secretary, Everardo Hegewisch.

Second subcommittee: Chairman, José de Landero y Cos; secretary, Carlos Sellerier.

Third subcommittee: Chairman, Manuel Fernandez Leal; secretary, Ricardo Garcia Granados.

Fourth subcommittee: Chairman, Lic. Joaquin D. Casasus; secretary, Carlos Diaz Dufoo.

When all the four subcommittees had brought in their reports, the tendency of which was in favor of monetary reform and the stabilization of the Mexican dollar, or peso, a fifth subcommittee was appointed to devise definite recommendations and to plan ways and means for carrying the monetary reform into execution.

The fifth subcommittee consists of the chairman and general secretary of the monetary commission and the chairman and secretaries of the other four subcommittees above mentioned.

However, the president of the commission, Mr. Creel, and the assistant secretary of the commission, Mr. Gurza, also attended the sessions and signed some of the reports.

The reports of the fifth subcommittee, summing up as they do the labors and results of the monetary commission and embodying definite recommendations for monetary reform, are of great importance and will be read with interest outside of Mexico, showing, as they do, the trend of enlightened thought in this country in regard to the monetary problem.

The reports in question translated into English are as follows:

The fifth subcommittee has addressed itself to a careful and minute study of the manifold questions involved in the formation of a plan of monetary reform on the lines laid down in the fifth point of the interrogatory formulated by the department of finance and public credit, to which the monetary commission has adjusted its labors.

With a view to systematizing its procedure and following the example set by the other subcommittees, the fifth subcommittee drew up a programme of its labors, constituting Annex No. 1 attached to this report, and confided the study of the four questions embraced by that programme to the following persons in the order of mention:

The first question was assigned to Eng. Manuel Fernandez Leal and Lic. Joaquin D. Casasus; the second to Mr. Ricardo Garcia Granados and Mr. Everardo Hegewisch; the third to Mr. Carlos Diaz Dufoo, Mr. Genaro Raigosa, and Mr. Pablo Macedo, and the fourth and last to Mr. José de Landero y Cos and Mr. Carlos Sellerier.

The partial reports or studies, emanating from the persons mentioned, are attached to the present report as Annexes 2, 3, 4, and 5, though it is to be noted that No. 3 embraces the opinion enunciated by Lic. Genaro Raigosa alone in regard to the reserve fund, for Messrs. Diaz Dufoo and Macedo, who did not advocate the immediate formation of that fund, did not, during the sitting of the fifth subcommittee, present any special contribution in writing in regard to that point.

After full examination and discussion had been devoted both to the four reports above mentioned as well as to the opinions expressed by Mr. Enrique C. Creel, the vice-president, who (and the same may be said of Mr. Jaime Gurza, the assistant secretary) who was an assiduous attendant at the sessions of the fifth subcommittee, a plan of monetary reform was finally drawn up by Messrs. Carlos Diaz Dufoo, Ricardo Garcia Granados, Jaime Gurza, Everardo Hegewisch, Luis G. Labastida, Pablo Macedo, and Carlos Sellerier. With the main outlines of that plan Messrs. Joaquin D. Casasus, Enrique C. Creel, Manuel Fernandez Leal, José de Landero y Cos, and Genaro Raigosa concurred, though Mr. Landero y Cos made an important reservation to the effect that he does not favor any change in the monetary laws of the Republic.

The plan in question is contained in Annex No. 9, in which the reasons for each one of the concrete measures proposed are also set forth.

The opinion of Mr. Raigosa, above alluded to (No. 3), and the documents marked as Annexes 6, 7, and 8, set forth the grounds on which Messrs. Casasus, Creel, Fernandez Leal, Landero y Cos, and Raigosa have based their several opinions, and therefore it seems useless in this report to do more than make mention of those documents.

We will, therefore, confine ourselves to stating here that the only points as to which our opinions were divided in no respect impair the

concurrence accorded by all of us to the fundamental lines of the project formulated by some of the undersigned which, as already stated, forms the closing portion of Annex No. 9.

Such, in brief, is the result of the labors which the fifth subcommittee has the honor of submitting to the honorable members of the monetary commission.

Mexico, December 19, 1903.

(Signed)

PABLO MACEDO,
MANUEL FERNANDEZ LEAL,
GENARO RAIGOSA,
JOAQUIN D. CASASUS,
JOSÉ DE LANDERO Y COS,
EVERARDO HEGEWISCH,
CARLOS DIAZ DUFOO,
CARLOS SELLERIER,
RICARDO GARCIA GRANADOS,
LUIS G. LABASTIDA.

ANNEX No. 1.

Monetary commission, Mexico, fifth subcommittee consisting of Messrs. Pablo Macedo, chairman; Joaquin D. Casasus, Carlos Diaz Dufoo, Manuel Fernandez Leal, Ricardo Garcia Granados, Everardo Hegewisch, José de Landero y Cos, Genaro Raigosa, Carlos Sellerier; and Luis G. Labastida, secretary.

PROGRAMME OF LABORS.

First question.—Which is the monetary system whose adoption is to be recommended to the Government?

The following points are to be separately studied and solved:

I. Ought the free coinage of gold to be permitted?

II. Ought the mints to be closed to the free coinage of silver on private account?

III. Ought the Government to be authorized to coin a new peso (dollar) or silver piece destined to constitute, at least temporarily, the basis of the monetary circulation of the Republic?

If the answer is in the affirmative:

(*a*) Ought that coin to be of the same weight and fineness as the present peso?

(*b*) Ought it to have the same effigy as the present peso?

(*c*) What limitation ought to be put upon the quantity of silver money that the Government is to coin?

IV. Is it advisable to coin new subsidiary silver money?

If the answer is in the affirmative:

(*a*) What class of coins are to constitute such subsidiary money?

(*b*) What should be their fineness?

(*c*) Should the coinage of the present bronze centavo be continued?

V. What should be the legal-tender capacity of the new coins, both for private persons and the Government?

VI. Is it advisable to lay down that the Government shall be

obliged to give hard-silver dollars in exchange for the subsidiary coins presented to it for such exchange?

If the answer is in the affirmative:

What are the main conditions that should be adopted for effecting that exchange?

Second question.—What transitional measures should be adopted with a view to the implantation of the new monetary system?

The following questions are to be studied and solved:

I. Can and ought the Mexican Government to prohibit the importation into the Republic of Mexican dollars that have been shipped abroad?

II. What quantity of the new coins ought the Government to have in readiness before beginning to put the new monetary system into execution?

III. Ought the present coins to be exchanged for the new coins at par, at a discount, or at a premium?

IV. Would it be well to adopt special rules for the exchange of the subsidiary coins?

V. Would it be well to expedite as far as possible the exchange of the old coins for the new coins; and if so, what would be the chief measures that might be adopted to that end?

Third question.—What measures ought to be taken to bring about the stability of international exchange on the hypothesis that the ratio in weight to be adopted between gold and silver is to be that of 1 to 32?

The following questions are to be studied and solved:

I. Can stability or fixity of exchange and of the ratio between gold and silver be attained without suspending the free coinage of silver on private account?

II. Can the same objects be attained without the formation of a special fund that shall assure or guarantee the exchange of the silver coin for gold?

III. If the answer be in the affirmative—that is to say, even if the formation of that fund is not considered indispensable—is it nevertheless to be recommended to the Government, and in what cases?

IV. Whether the formation of a special fund, that shall assure or guarantee the exchange of the silver coin for gold, be considered necessary or only advisable, the following among other questions as to its accumulation and operation are to be considered:

(*a*) Ought the fund to be formed of gold or of sliver?

(*b*) Ought it to be formed in Mexico or abroad or both in Mexico and abroad?

(*c*) What ought to be its amount, at least approximately?

(*d*) Ought it to be administered by the Government exclusively or by a committee or corporation to be appointed by the Government?

(*e*) What should be the chief conditions of its operation?

V. Independently of the closing of the mints to the free coinage of silver and the formation of a monetary reserve fund, are there any other measures which it would be well to advise the Government to adopt in order to bring about stability or fixity of exchange and of the ratio between gold and silver?

If the answer is in the affirmative, said measures should be described in detail.

Fourth question.—Is it advisable to counsel the adoption of special measures, such as the abolition or diminution of taxes and the like, that will save not only the silver-mining industry but export industries in general from the losses that might accrue to them from a change of monetary system in the Republic?

ANNEX No. 2.—REPORT OF MESSRS. FERNANDEZ LEAL AND JOAQUIN D. CASASUS.

SIR: The fifth subcommittee appointed to study the various measures to which other nations have resorted to stabilize the rate of their international exchange and to solve their monetary difficulties, drew up a programme to which its work was to be adjusted and commissioned the undersigned to frame, and give their reasons for, the bases of the new monetary system which the Government of the Republic is to be counseled to adopt.

The portion of the programme of the fifth subcommittee's work assigned to us reads as follows:

First question.—Which is the monetary system whose adoption is to be recommended to the Government?

The following points are to be separately studied and solved:

I. Ought the free coinage of gold to be permitted?

II. Ought the mints to be closed to the free coinage of silver on private account?

III. Ought the Government to be authorized to coin a new peso (dollar) or silver piece, destined to constitute, at least temporarily, the basis of the monetary circulation of the Republic?

If the answer is in the affirmative:

(*a*) Ought that coin to be of the same weight and fineness as the present peso?

(*b*) Ought it to have the same effigy as the present peso?

(*c*) What limitation ought to be put upon the quantity of silver money that the Government is to coin?

IV. Is it advisable to coin new subsidiary silver money?

If the answer is in the affirmative:

(*a*) What class of coins are to constitute such subsidiary money?

(*b*) What should be their fineness?

(*c*) Should the coinage of the present bronze centavo be continued?

V. What should be the legal-tender capacity of the new coins both for private persons and the Government?

VI. Is it advisable to lay down that the Government shall be obliged to give hard silver dollars in exchange for the subsidiary coins presented to it for such exchange?

If the answer is in the affirmative:

What are the main conditions that should be adopted for effecting that exchange?

The undersigned believe that, whatever measures may be adopted to stabilize the rate of international exchange, it is absolutely necessary to modify the present monetary system in such manner and in such form that the value of our silver peso (dollar) shall be rendered wholly independent of the gold price of the metal, silver, so that our

money may not continue to suffer the constant and brusque oscillations to which the price of the metal in question is subject.

In order to attain this end, private persons must be deprived of the right to take their silver bars to the mints of the Republic to have them converted into coin; for, though it is true that the unlimited coinage of a metal tends to give greater fixity to its value, seeing that the consumption thereof for monetary purposes is the largest and most important of all, it is also true that the value of the metal, considered as a commodity, must control the value of the coins of that metal as long as the holders of the commodity in question are entitled at their pleasure and without limitation to have it converted into monetary units.

The suspension of the coinage of any money on private account will perforce tend to enhance its value, because it restricts the quantity of money in circulation without abating the ever-increasing demand which every progressive country experiences for money in order to continue to carry on, without obstacle or hindrance, its commercial transactions of every kind. If the quantity of coins in circulation can not be increased in proportion to the increased necessity for their use, and if the utmost rapidity that can be imparted to the circulation does not suffice to meet the necessity of employing a larger quantity of coins, it is unquestioned that, by the natural operation of the law of supply and demand, the value of such coins will be enhanced.

This enhancement of the value of the coins in circulation must have a limit, and if that limit, in countries governed by the same principles that inform monetary laws, is fixed by the international trade in precious metals which attracts them to points where there is most need of them and drains them from those markets where, by reason of their very abundance, their price tends downward, the limit in question must be artificially fixed in countries where the monetary laws are not based on the fundamental principles that should control them.

In order to fix said limit it is indispensable to associate the value of the silver unit whose coinage is suspended with a gold coin, whether the latter circulates or not, whether its free coinage is or is not permitted.

The raison d'être of the limit consists in the fact that when the enhanced value of the circulating silver coins, due to their scarcity, has once passed that limit gold will be imported, and whether it be coined or not, will regulate prices and will tend to reduce the value of the silver coin and bring it back to its proper level.

The application of this system is nothing else but the adoption of gold monometalism without gold coins in circulation. Gold, as the ideal standard to measure values, will govern prices; and for circulating purposes the money will consist of disks of the metal silver, whose value will not depend on the silver which they contain, but on their scarcity and the possibilty of their conversion into gold coin. The silver coins in circulation, though they may be received as unlimited legal tender, will necessarily be based on the principles that regulate the emission of subsidiary coins, because they can not be used for exportation and by an imperative necessity will remain exclusively confined to the interior circulation of the country in which they are issued.

In accordance with the foregoing outlines, the new monetary system must repose on the following principles:

I. The opening of the mints to the free coinage of a new gold piece.

II. The closing of the mints to the free coinage of silver on private account.

Without doubt, during the first years in which this system becomes operative, gold will not enter into the circulation; but it is to be hoped, when the parity adopted between the two metals, gold and silver, is attained and the value of the silver money due to its scarcity tends to exceed that parity, that gold will be attracted to our mints.

The possibility of gold being coined involves the necessity of determining the weight and fineness of the new monetary unit of that metal and of the coins which may have to be struck as multiples thereof.

In order to fix the fineness and weight of our gold coinage we must take into account the following questions:

I. Is the new gold coin to be based on a ratio of 1 to 32 between gold and silver?

II. Is it preferable to make our gold coin a submultiple of the pound sterling or the American dollar or a multiple of the franc, in order to facilitate our commercial transactions with England, the United States, and France?

III. Ought the new gold coin to be of the same fineness as the present one, authorized by our monetary laws, or ought we to adjust it to the decimal system?

The fifth subcommittee when initiating its labors and taking into account the brusque oscillations which the price of silver on the London market has passed through of late, did not deem fit to decide whether the ratio between gold and silver which shall serve as the basis for the stabilization of our international exchange, should be comprised between the minimum of 1 to 36 and the maximum of 1 to 32. Nevertheless, it saw fit to recommend that the ratio of 1 to 32 should be adopted as the hypothetical basis of all the studies that were to be undertaken being the ratio that would offer the fewest difficulties in its adoption.

The ratio of 1 to 32 may, however, occasion a drawback worthy of being taken into consideration in the creation of our new gold currency, for that ratio would mean that said currency would be divorced from all other gold currencies at present in use, which assuredly would not tend to foment the future development of our commercial relations.

If gold is the monetary metal par excellence and is destined to perform the function of international money wherewith the trade balances among nations are to be settled, it is of the highest importance to bring about or to accentuate a more marked tendency daily toward the unification of gold coins.

Therefore, to make Mexico's new gold coin a multiple or submultiple of the coins already in use among the nations with which we cultivate the closest commercial relations is to add another factor to the future development of our commerce.

It seems idle to discuss whether the new coin ought or ought not to conform to the decimal system. In Mexico the decimal system rules and it is necessary to adopt its principles. But, independently of that, it is impossible to conceive the emission of a new coin save in

obedience to those principles. Our financiers have been sufficiently strong in their condemnation of the fact that our present gold coin is 0.875 fine and not 0.900 fine and to justify their condemnation it is sufficient to state that Mexico is the only civilized nation in which gold coins continue to be struck at the old standard of fineness of 21 carats.

The law of November 28, 1867, directed that the coins should bear an inscription showing the fineness of the metal in thousandths, forgetting that this was not sufficient in order to assure compliance with the metric decimal system.

The new Mexican dollar, at the ratio of 1 gram of gold to 32 grams of silver, would contain:

	Gram.
Pure gold	0.7638
Gold 0.900 fine	.8486

If the new gold dollar is made the one-tenth part of the pound sterling, it would contain:

	Gram.
Pure gold	0.73223
Gold 0.900 fine	.8136

If the new gold dollar is made the one-half of the American dollar, it would contain:

	Gram.
Pure gold	0.7523
Gold 0.900 fine	.8359

If the new gold dollar were made equal to 2.50 francs, it would contain:

	Gram.
Pure gold	0.7258
Gold 0.900 fine	.8064

The ratios between gold and silver, according as the submultiple of the English or American coins or the multiple of the French coin are taken as the basis, would be as follows:

	Grams.
One-tenth part of the pound sterling, the ratio would be	1 to 33.37
One-half of the American dollar, the ratio would be	1 to 32.48
Multiple of the franc, ratio	1 to 33.67

As will be seen, if the ratio of 1 to 32 is adopted, the gold peso will be a new coin different from all others in existence, because it will have to contain—

	Gram.
In excess over the one-tenth part of the pound sterling, in gold of the fineness of 0.900	0.0350
In excess over the half of the American dollar	.0127
In excess over the multiple of the franc	.0422

The undersigned think that preferably the American half-dollar ought to be adopted as the new gold peso both because on that basis we approach as much as possible to the ratio of 1 to 32, and because 80 per cent of our import and export trade is carried on with the United States, the nation from which we buy most of what we need and to which we sell most of our export products. It is true that the world's center of mercantile transactions is London, and that the pound sterling is the coin that serves for the settlement of international trade balances; but undoubtedly it is far more important to us that our coin should be a submultiple of the dollar, which itself is a submultiple of the pound sterling, seeing that out commerce with

England is insignificant in comparison with our commerce with the United States of America.

The new gold dollar, by reason of its small size, would never be coined; but for purposes of circulation we could adopt the "escudo" of \$5 with 3.7615 grams of pure gold or 4.1795 grams of gold 0.900 fine and the \$10 ounce with 7.523 grams of pure gold or 8.359 grams of gold 0.900 fine. The \$5 "escudo" would be a coin of much use in circulation because it would fill a place corresponding to the 10-franc piece in France and other countries of the Latin Union and the half-severeign in England; and the \$10 ounce would be the coin for large transactions, taking the rôle of the pound sterling and the piece of 20 francs or 20 marks.

The undersigned have not thought fit to recommend the coinage of the old ounce of \$20, for a very long experience demonstrates that it is unsuited for circulation and is only serviceable for hoarding purposes.

The basis, therefore, of the monetary law would be the gold dollar, and the coins in circulation would be the "escudo" of \$5 and the ounce of \$10.

The closing of the mints to the free coinage of silver on private account is the measure which the new monetary system most urgently demands, for on its adoption depends the dissociation that will develop between the value of our dollar in the interior circulation and the value of the metal—silver—which it contains.

The adoption of this measure involves the study of the following questions:

I. Ought the present dollar, which, whatever else it is, is chiefly one of our oldest historical monuments and the trade coin par excellence of America and the Far East, to be retained in circulation?

II. Ought a new silver dollar to be adopted for the purpose of differentiating it from the present one?

III. May the coinage of the old dollar, as a trade dollar, destined for exportation, continue to be permitted?

The undersigned have no hesitation in this respect, for they consider that the coinage of a new dollar is indispensable.

Their opinion is based on the following considerations:

I. The necessity of preventing the importation of the old Mexican dollars.

II. The expediency of rendering more difficult the counterfeiting of the coin, which is calculated to be greatly stimulated by the difference between the value of the coin and the value of the metal constituting it.

III. The complete disappearance of all the advantages previously associated with the old Mexican dollar.

As the Mexican dollar has not merely been our national coin, but a trade dollar that has circulated and still circulates as unlimited legal tender in China, in the British possessions in the Far East, and in the Philippines, it would be very easy to import it back into the country in large quantities in order to take advantage of the difference in value which the coin may attain as compared with the value of the metal which it contains. As the basis of the monetary reform consists in imparting to the dollar a greater value than belongs to it as silver bullion, it is unquestioned that the reform would not fulfill its object, if the reimportation of the millions of dollars circulating outside of the country were to be permitted.

The mere prohibition of their importation or the creation of a duty that would be tantamount practically to such a prohibition would not be a sufficiently efficacious measure for the attainment of the Government's wishes. Speculation glides through doors that can not be shut in its face, and finds a locus standi that can not be withdrawn from under it.

The cost of coining the new dollar would be more than compensated by the guaranty which it would afford to the future circulation of the country.

But, independently of this circumstance, it must be borne in mind that our present dollar leaves much to be desired as a coin, and readily lends itself to the purposes of the counterfeiter. The necessity of conserving the prestige which our dollar had won in the Far East, and of maintaining the higher value which it once attained as a coin over its bullion value, has acted as an insuperable obstacle to the modification of our dollar by the Government in such manner as to render its falsification if not impossible at any rate extremely difficult. Our dollar is very far from being an artistic model, as every coin ought to be, and the imperfections of its design, the poor finish and indistinctness of its milling invite counterfeiters to imitate it.

Now if the old dollar is retained, the enhancement of value given to it over its bullion value will still further encourage counterfeiters, for they will be able to counterfeit it without altering either its fineness or its weight, and such counterfeiting will produce the very effects which it is desired to obviate by prohibiting the reimportation of Mexican dollars.

On the other hand, what is to be gained by retaining the old dollar? Except that the cost of coining a new dollar would be saved, it can not be said that any advantage would be secured. The value in excess of its bullion value once attained by our dollar on the London market no longer exists, and the new monetary laws which are on the point of being issued for the French and English possessions, for the Philippines, and perhaps for the Chinese Empire, will deprive it of the legal tender character which it has hitherto enjoyed.

In fact, in a very short time the new dollar which the American Government has ordered coined for the Philippines will be put into circulation; the dollar of Indo-China already circulates in such quantities in the French possessions in the Far East that practically it has almost banished the Mexican dollar; the British dollar has replaced the Mexican dollar in the Straits Settlements, Hongkong, and Labuan, and the international exchange commission appointed by our Government to approach foreign governments has undertaken to draw the attention of the civilized world to the necessity of the adoption by China of a monetary system of its own.

The old Mexican dollar, when these measures shall have been adopted, will have come to the end of its career as a trade coin, and, like the thaler of Maria Theresa, it will survive only as a memory of what was once a factor of civilization and progress in the ancient nations of the East.

But if it is necessary to coin a new dollar, ought it to be of the same weight and fineness as the present dollar?

In what proportions ought it to be coined?

An obvious argument of expediency demands that the new coin shall have the same weight and fineness as the present dollar. That

argument is the desirability of not altering the basis of pending contracts throughout the Republic.

As, in accordance with the precepts of civil law all presentations in money must be made in the kind of money agreed upon, and, if this is not possible, in the quantity of current coin that shall coincide with the real value of the money owed, a stipulation has always been introduced into contracts to the effect that, in the event of a new money coming into existence, the debtor will only be held to have met his liabilities when he shall have delivered a quantity coinciding in fineness and weight with the present coin.

Now, in order that this stipulation, which is countenanced by the civil law, may be complied with without imposing a sacrifice on the debtor and originating difficulties of every kind in the carrying out of pending contracts, it is necessary that in creating a new coin said coin shall be of the same weight and fineness as that at present in circulation, in order that it may be received without difficulty and that payments made therein may constitute a complete release to debtors.

On the other hand, in consummating a monetary reform it is the duty of the public administration, as an essential condition of the success of that reform, to take such measures as will assure the ready acceptance of the new coin by all.

Now, to assure its acceptance by the public without difficulty, it is necessary that it shall continue to constitute a complete release from debt to all persons through whose hands it passes and that it shall serve definitely to satisfy and extinguish pending obligations.

This assuredly does not mean that the new silver dollar will have to contain 27.073 grams of a fineness of 0.90277. We think that the new dollar may be considered equal to the old one if it contains the same quantity of pure silver—that is to say, the 24.441 grams contained by the old Mexican dollar. The fineness may be 0.900, and what may be lost through the difference in fineness will be made up in weight, so that instead of containing 27.073 grams it will contain 27.156 grams.

Thus the new dollar may be equal to the old one and be a decimal coin containing 27.156 grams of silver 0.900 fine.

In what quantities is the new dollar to be coined?

As the object of the reform is to enhance the gold value of silver coin, and to that end it will be necessary to deprive private persons of the right of having their silver bars converted into coins, it is unquestionable that the quantity of new dollars to be emitted must be equal to the quantity at present in circulation.

There is no reason for curtailing the quantity in circulation, and there would be no object in leaving a portion of the old coins, which would be no longer available for use in commercial transactions, in the hands of their present holders instead of exchanging them for the new coins.

On the other hand, it would not be advisable to authorize the Government to put a greater quantity of the new dollars into circulation, for this would tend to delay the success of the monetary reform, seeing that the greater the excess of the quantity of coins provided over the requirements of circulation, the greater would be the difficulty of attaining the parity inherent to the ratio at which the two metals, gold and silver, would be coined.

In accordance with the above considerations the new coin may conform to the decimal system; it will be equal in value to the old coin because it will contain the same quantity of pure silver; it will bear a different effigy in order to distinguish it; and it will be issued in quantities sufficient to be given in exchange for all the old coins at present in circulation.

No one can question the expedience of taking advantage of the monetary reform that will be carried out to issue new subsidiary or token coins of silver.

As a matter of fact, the present subsidiary silver coinage, or, in other words, the pieces of 50, 20, 10, and 5 cents at present in circulation have been and are subject to the great drawback that the metal from which they are coined is of the same fineness as the metal from which the dollar is coined; that is to say, 0.90277, and that their weight is proportional to that of the monetary unit, so that, in consequence, they are unlimited legal tender.

Our subsidiary coins do not conform to the principles that should regulate such coins; for if they are and ought to be exclusively destined to facilitate the small transactions which the life of a community renders indispensable, their legal-tender capacity ought to be limited and the value of the metal which they contain ought to be less than their value as coins.

The subsidiary coinage of almost all the nations of Europe is now in conformity with these principles, and owing to that circumstance it is able to remain in circulation and to render the important services for which it is intended.

When a subsidiary coinage is made of a metal of which the value is equal to its coinage value, it can not easily be kept in circulation, for such coins prove exportable like coins that are unlimited legal tender.

If a subsidiary coinage has very precise and necessary functions to perform, it must not be exportable; it must always remain in the interior of the country, and in order that those objects may be attained without any difficulty there must be a difference between the conventional value of such a coinage and the value of the metal which it contains.

In order to obviate the accumulation of this conventional coinage in the hands of the public, its legal-tender capacity must be restricted to a given quantity. This restriction is the rule that secures an equitable distribution of this class of coin in the circulation, for without detriment to the interests of its holders it renders the services for which it is exclusively intended.

In accordance with these principles, which are the soundest known in reference to this question, the undersigned are of the opinion that the new subsidiary coins, though proportional in weight to the monetary unit, ought to be 0.800 fine.

This would be a very opportune occasion to withdraw from circulation the silver 5-cent piece, which is too small a coin, and is subject to rapid wear owing to the frequency with which it enters into the daily transactions of the people. All countries which had a coin similar to our silver 5-cent piece, such as the English 3-penny piece and the American coin worth one-twentieth of a dollar, have either withdrawn it from circulation or replaced it with a nickel coin. Perhaps in our case a substitution of this kind would not be opportune, and it

would be better to suppress the coin in question absolutely, without issuing a new one in its stead.

The half-dollar, the 20-cent piece, and the 10-cent piece will then be of the following weight and fineness:

	Grams.
The half dollar will contain in pure silver	10.8624
The half dollar will contain in silver 0.800 fine	13.578
The 20-cent piece will contain in pure silver	4.3448
The 20-cent piece will contain in silver 0.800 fine	5.431
The 10-cent piece will contain in pure silver	2.172
The 10-cent piece will contain in silver 0.800 fine	2.715

The legal-tender capacity of the new subsidiary coinage may be limited to $20, this limit being observed both in the relations of private persons among one another and of private persons with the Government. This limit would be more or less the same as that to which silver money is subject in England, where its legal-tender capacity does not exceed 40 shillings. The limit in question is sufficiently prudent and will suffice for the object had in view.

The undersigned do not consider that it is necessary to introduce any change in the present bronze centavo.

Since the emission of the centavo was adjusted to the principles which should regulate the emission of such coins no further difficulty has occurred in its circulation. It is received by the people without hesitation and every day the field of its usefulness grows wider.

The decimal coinage question, which for so many years was justly a source of anxiety to the public authorities, has been definitely solved, and the mere incorporation of the present laws into the new monetary law would suffice to assure the continuation of the coinage in the future, subject to the same system as at present regulates its emission.

The diameter and margin as to weight and fineness of the new silver and gold coins may continue to be the same as provided by the decree of November 28, 1867.

The undersigned beg leave to recommend the fifth subcommittee to draw the Government's attention to the expediency of not collecting any tax on the mintage of gold coins.

It is probable that during the early years of the prevalence of the new system, gold will not be attracted to the mints; but, in order to encourage the holders of gold to convert their bars into coin, it would perhaps be a wise step to make the coinage thereof free. The British Empire has in this connection set an example which is particularly worthy of imitation.

The undersigned have concluded the task assigned to them by the fifth subcommittee. They regret that they have not had time to make a more profound study of the questions involved in the establishment of a new monetary system, but they have endeavored in as short a time as possible to manifest their ideas in order that they may serve as the basis of studies for the final resolutions that are to be adopted.

JOAQUIN D. CASASUS.
M. FERNANDEZ LEAL.

MEXICO, *September 29, 1903.*

ANNEX No. 3—REPORT OF MESSRS. RICARDO GRANADOS AND EVERADO HEGEWISCH.

To the president of the fifth subcommittee
of the monetary commission, present:

In the distribution of work adopted by the fifth subcommittee, with a view to the formation of a project of monetary reform, the second question, referring to the transitional measures that should be adopted to place the monetary circulation on a new basis at the hypothetical ratio between gold and silver of 1 to 32, was assigned to us. In the form wherein it was submitted to us the question was as follows:

What transitional measures should be adopted with a view to the implantation of the new monetary system?

The following questions are to be studied and solved:

I. Can and ought the Mexican Government to prohibit the importation into the Republic of Mexican dollars that have been shipped abroad?

II. What quantity of the new coins ought the Government to have in readiness before beginning to put the new monetary system into execution?

III. Ought the present coins to be exchanged for the new coins at par, at a discount, or at a premium?

IV. Would it be well to adopt special rules for the exchange of the subsidiary coins?

V. Would it be well to expedite, as far as possible, the exchange of the old coins for the new coins, and if so, what would be the chief measures that might be adopted to that end?

We were certainly not impervious to the difficulties which the solution of the present problem involves, and, fearing that the exclusive application thereto of scientific theories might lead us into serious errors, we thought that the safest course was to look for precedents in other countries whose situation has been similar to that in which we are placed; to draw inferences from the teachings of practice and to fill in or correct, to the best of our ability, the gaps or deficiencies that might seem to us to exist in the methods used in like circumstances by foreign governments when those methods came to be applied to our own case. The present epoch, from a monetary point of view, is characterized by continuous decline and violent fluctuations in the value of silver as compared with gold, and in view of that fact we have given our attention to the study of the monetary reforms introduced during the last twelve years in Austria-Hungary, Japan, British India, and Peru. We have refrained from entering into considerations in regard to such countries as Chile and Argentina, in which, for various reasons not directly connected with the difficulties that are inherent to the question, the desired reform has so far been frustrated.

Before the year 1848 the monetary unit of the Austrian Empire was the silver florin, weighing 14.031 grams; but political events and the war of that year led the Government to authorize the national bank to issue a large quantity of legal-tender paper currency, so that in consequence silver disappeared from circulation. The fluctuations in the premium of the silver florin as compared with paper in the twenty-five years which followed are not of great interest to us. But a fact that is worthy to be taken into consideration is that when the rapid

decline of silver in the year 1873 set in, it had very little or no effect on the value of the bank notes as expressed in gold, and, beginning with the year 1878, the apparent anomaly of a paper florin being worth more than the coin for which it stood became a reality. This was due, no doubt, to the fact that the Government kept the circulation within certain limits and did not make use of its right to redeem said circulation in silver, having already made up its mind to adopt the gold standard. But this fact demonstrates to the point of evidence that the value or purchasing power of the monetary unit depends almost exclusively on the quantity thereof in circulation. Though this phenomenon is instructive and in consequence useful to our studies, it must be acknowledged, on the other hand, that the methods adopted by the Austro-Hungarian Government are inapplicable to our case in Mexico, for in passing from a fiduciary standard to the gold standard that Government was easily able to adjust the value of the new unit with entire exactness to the average value of the old unit in the last ten years, which it would not have been able to do if the old unit had been of silver, as any advance in the value of that metal subsequent to the conversion would have produced an exodus of silver in accordance with Gresham's well-known law. Similarity of circumstances, therefore, does not exist between Mexico's situation at present and the situation of Austria-Hungary when that country effected its last monetary reform.

The Government of Japan had declared itself in favor of the gold standard in 1871, but certain errors committed at the time that the measure was adopted, the civil war of 1877, the diversity of silver coins, and the excessive quantity of paper money in circulation hindered the reform for some time, and it was not until the year 1897, after the war with China, that the indemnity paid by the latter country was utilized to introduce the gold standard once for all without restrictions and qualifications. With a view to rendering this measure effective, the 31st day of July, 1898, was fixed as the last date for exchanging the necessary portion of silver in circulation for the new gold coin, and in this way the sum of 45,588,000 yen was exchanged. The silver yen is equivalent to the Mexican dollar, and the ratio in which the new gold yen was coined, with respect to the silver yen, was 1 to 32.

It would be of considerable interest from our point of view to study this reform more in detail were our Government inclined to follow the example of Japan. That example seems to us personally most worthy of imitation, but, seeing that the majority of the monetary commission do not share that view and that public opinion is not yet sufficiently prepared, we will confine ourselves to what we have already said and will proceed to examine other examples that are suited to our purpose.

Refraining, therefore, from pointing out the lessons which the example of Japan might afford us, we proceed to take up the examples of British India and Peru as more suited to be taken into consideration under the present circumstances.

The silver rupee, which before the depreciation of the white metal was worth 2s., or 24d., was proclaimed the legal coin of India in 1835. The value of that coin having in the year 1876 fallen to 18½d., certain associations petitioned the Indian government to sup-

press the free coinage of silver; but on that occasion the answer given to them was that there was no reason, for the present, to modify the existing standard. As after that declaration the depreciation of silver continued and its fluctuations began seriously to affect trade, the government in 1878 made up its mind to consider the adoption of the gold standard, with the proviso that the circulating medium should continue to be composed exclusively of silver, to which the people had become accustomed. Some years elapsed, however, before this idea took concrete shape, owing to the fact that, as in Mexico, there were many persons who believed that the value of silver would again become stable, though not perhaps at the old ratio of 1 to 16, or that an international agreement would be reached. The international monetary conference which met at Brussels in 1892 terminated without practical results, as previous conferences had done, and then it was that the Indian government resolved to introduce the monetary reform, which consisted in stabilizing the ratio of the silver coin to gold without, for the moment, putting gold into circulation.

In accordance with this determination a decree was issued on June 23, 1893, closing the mints to coinage on private account and laying down that in future rupees would be sold at 16d. gold each. The Government rightly calculated that inasmuch as, other things being the same, the value of a coin depends on the quantity of it in circulation, the value of the rupee would have to increase as a result of its growing scarcity consequent upon the suspension of its coinage. On the other hand, the market's highest limit would have to be 16d., seeing that at that price rupees could be bought from the government. The rupee, which had been worth 14½d. in 1893, first underwent a depreciation on account of the large quantities which speculators threw upon the market in expectation of the reform. But afterwards the rupee gradually rose until in 1898 it was worth 16d. The contraction did not fail, however, to cause some crises which, du reste, were not more acute than those which had previously been occasioned by the decline of silver with its concomitant fluctuations. Since 1898 the rupee has been maintained, save for slight variations, at the legal parity of 16d. The slowness of the rise in the value of the rupee may be ascribed to the slow expansion of public wealth, the years 1896–1898 having been years of famine and bad crops, as well as to the fact that in those years gold was scoring a higher purchasing power as compared with the principal articles of consumption, as proved by the tables of the noted economist Sauerbeck.

A method similar to that of India was adopted by Peru to establish the gold standard with an actual circulation of that metal. The Government of that Republic having become convinced of the necessity of a reform issued on April 9, 1897, a decree closing the mints to the free coinage of silver. In regard to the "soles" that were circulating abroad, principally in Central America, it was decreed that "inasmuch as they had become converted into a commodity by the mere fact of their exportation from the national territory they could only return thereto as a commodity." In the following article of the same decree it was ordered that the "soles," which might be imported, should be melted down and returned to their owner in the form of bars. The growing scarcity of silver coins has, in fact, caused the value of the "soles" to rise to legal parity, attracting

gold in fair quantities, so that at present gold and silver circulate at par at the legal ratio of 10 "soles" for 1 Peruvian pound, which is equal to the pound sterling.

The present situation of Mexico possesses considerable similarity to the situation in Peru, before the latter nation effected its monetary reform, for Peru also had the silver standard, and a large quantity of its coins were in circulation abroad. We consider Peru's methods worthy of imitation with some modifications, especially with respect to the coins circulating abroad. The Government of Peru confined itself to prohibiting their reimportation, which, in our case, does not seem a sufficiently efficacious measure for the future, for we deem it necesary to strike a new coin which will be given in exchange for that at present circulating in the Republic and which, after the consummation of the reform, will alone be legal tender.

In view of what we have said and of other considerations which we will offer later on, we would recommend the following transitional measures:

1. Upon the publication of the decree of reform the mints will be immediately closed to the free coinage of silver and the reimportation of Mexican dollars of the present legal issues will be prohibited under the severest penalties.

2. The Government will proceed to coin as soon as possible a silver dollar containing the same quantity of pure metal as the present dollar, of a new design, which shall be as perfect as possible, and said dollar will be exchanged at par within fifteen months for the dollar at present circulating in the Republic.

3. The new subsidiary silver coins will also be given in exchange for the present ones at par within the same period of time, but the Government may extend that period if it deems fit.

4. In order to consummate the coinage of new money, the Government will have to provide itself with the sum of 18 million dollars, either by means of a public loan, or by taking it from the reserves, or through advancements to be made by the banks in return for special certificates, which they may compute as part of their reserves.

5. In view of the fact that Mexico's mints would not be equal to the work of new coinage within the stipulated period, recourse will be had to such foreign mints as the Government may deem fit. To that end a commission of two persons will be sent to each of those mints properly to supervise the work.

6. As soon as the Government secures the necessary dies the mints will be thrown open to the free coinage of gold at the ratio of 1 to 32.48. The gold coins will be unlimited legal tender.

7. During the fifteen months allowed for the exchange of coins, the coins both of the present and the new issues will be legal tender; but after the expiration of that period the coins of the new issue will alone be legal tender, with the exception of the subsidiary coins, for which the period of conversion may be extended.

8. The Government will sell to any applicant the new silver dollar at the rate of 0.752 of a gram of pure gold, provided that its intrinsic value is not greater.

9. In all engagements to pay that may be contracted in the future, it will be stipulated that said payments will be made in Mexican coin according to the law in force and mentioning its date. But if

the parties insist upon fixing the quality and weight of the coin, the debtor shall be entitled to pay in legal money, at the market price on the day when the debt becomes due, a quantity of metal corresponding to the amount which he owes, if he can not pay in the stipulated coin.

10. In the case of engagements to pay, contracted prior to the publication of the decree of conversion and becoming due subsequently to that decree, the debtor will be entitled, in case a rise in the value of silver brings about the replacement of a considerable quantity of silver coins by gold coins, to effect payment in the latter, in which case article 1453 of the civil code of the federal district will be without effect.

11. If an advance in the value of silver should enhance the value of the silver dollar above the ratio mentioned in the foregoing clauses, and the mints should be unable to meet the demand for gold coins with the necessary promptitude, the government may invest American gold coins with a legal tender character until they can be replaced by Mexican gold coins. The American gold coins will, in such an event, be received at the rate of 2 pesos per dollar. If such an advance occur before the Government has provided itself with the necessary dies, the exportation of subsidiary coins will be prohibited.

12. Two years after the date of the decree the coinage and importation of dollars of the present issue will be permitted in the capacity of a commodity.

For the better comprehension of the ideas that have guided us in presenting the foregoing programme of conversion we beg leave to make some complementary observations.

Starting from the principle already laid down that the appreciation and stabilization of our dollar can only be brought about by restricting its circulation, it has seemed to us indispensable that the closing of the mints be supplemented by the strict prohibition to reimport Mexican dollars of the present legal issues in order to prevent the return of the dollars that are held abroad, principally in Asia, causing the depreciation of the dollars circulating here.

In order to provide a new monetary circulation we have estimated that three months would be necessary to make the new dies and a year for the actual work of coinage, giving a total of fifteen months. By coining 10 million dollars per month, which will be given in exchange immediately for dollars of the present issue, we think that a loan of $18,000,000 would be sufficient for the Government's purposes.

According to our tenth proposition persons who may have contracted engagements to pay, prior to the decree of conversion, are entitled to pay in gold, if the latter metal shall have replaced silver by reason of an extraordinary appreciation thereof. In view of the fact that our projected law in general favors the creditor, it seemed to us just to make in this case an exception in favor of the debtor.

Our eleventh proposition also contemplates the contingency of an appreciation of silver resulting in the exodus of that metal and its replacement by gold. In such an event there would be a risk of a depletion of cash, which, we think, would make it desirable to invest American gold coins provisionally with a legal tender character, and if the new subsidiary coins, which on account of their lesser value would not leave the country, shall not as yet be in circulation, we think

that the exportation of the present subsidiary coins should be prohibited in order that there may not be a scarcity of such coins for small transactions.

The above is what we have the honor of proposing to the fifth subcommittee that it may reach a suitable decision.

R. G. Granados.
E. Hegewisch.

Mexico, *October 7, 1903.*

Annex No 4.—Necessity of a Reserve Fund—Opinion of Delegate Genaro Raigosa.

Third question.—What measures are to be adopted to bring about the stability of international exchange on the hypothetical basis that the values of the new coins of gold and silver that are to be struck are to be in the ratio of 1 to 32 of the weight of pure metal that each contains?

This question, which I do not hesitate to consider as the basic question of the whole monetary problem, has given rise to such differences of opinion among the members of the special section of the fifth subcommittee—differences which it has been impossible to overcome by verbal debates—that it has become necessary to state them in writing, with a view to the methodical condensation of the considerations influencing each of the persons maintaining opposite views, and with the further object of complying with the suggestion of the minister of finance that each member of the monetary commission should express his ideas in this momentous question. The views, therefore, that I shall express in this brief essay are purely personal, the product of my own studies, and not polemical resources to win adherents or corroborative votes that might give authority and prestige to my opinions.

I. In order to get rid of silver monometallism there is no course but to adopt the gold standard, with or without a gold circulation. In the case of the latter alternative, which is the one adopted by the monetary commission, the silver coin tends to divest itself of all relationship with the metal of which it is composed, to emancipate itself from the fluctuations of the price of that metal in bars, and to become dependent, as far as its exchange value is concerned, on gold alone as the unit whereby all values are measured or estimated.

II. The adoption of the gold standard without a gold circulation is a transient system, a preparation for the gold standard with gold in circulation, which is the monetary ideal of the present age. That preparatory system is indispensable to the avoidance of the crises or upheavals of a brusque change of monetary régime, providing for the gradual entrance of gold into circulation and for an ever increasing degree of proximity to a stable and permanent parity in the legal relationship of values.

III. In consequence the system adopted by the monetary commission is simply a prologue to the establishment of the gold standard with gold in circulation.

IV. From this point of view the inquiry as to the measures necessary to bring about legal parity, and when once attained to conserve it permanently between the new silver coins and the gold unit, reduces itself to the following points: (1) What is the most efficacious method

to elevate artificially the gold value of the new silver coins to the legal parity? And secondly, what is the most efficacious method of assuring the permanent fixity of international exchange when the parity shall once have been realized?

V. In order to elevate artificially the gold value of the new silver coins to legal parity there are two fundamental methods which supplement one another:

(*a*) Limitation of the quantity of the inferior metal coined.

(*b*) The convertibility of the new coins of the inferior metal into the superior metal at the rate fixed by law.

VI. The former method brings into play the law of monopoly or the enhancement of value caused by scarcity. The closing of the mints to the free coinage of silver thus figures a condition sine qua non of the monetary reform. The commission has been unanimous in the adoption of this feature. The mints will turn out the new silver coin merely in the amount necessary to replace the old coin. When the old coins shall once have been called in or melted the mints will only coin silver dollars in exchange for gold. If gold is not offered at the mints in quest of silver dollars, the quantity of silver dollars circulating in the country at the date of the coming into operation of the new monetary law can not be added to. The stock of silver dollars will therefore be restricted to the supply thereof in the country at the time when the exchange of the old coins into the new coins shall have been completed. If commercial or other necessities cause the exportation, or reduction in other ways, of the circulating supply of silver dollars, the law of scarcity or limitation of supply will come into play and will manifest itself in the appreciation of the remainder. Even without exportation or the withdrawal of dollars for hoarding purposes the mere expansion of business and the increase of the population will produce the same results by reason of an increasing demand in the face of a supply which the absence of additions to the stock of silver dollars causes to remain stationary.

VII. But will the normal operation of the law of scarcity, will the closing of the mints to the free coinage of silver suffice to bring about the legal parity of the new silver coins with gold and the stabilization of international exchange without entailing difficulties and periods of monetary crisis which, owing to their intensity and duration, will cause evils that will perhaps outweigh the benefits that may legitimately be expected from the monetary reform? This is where the difference of opinion begins. Mine is strongly negative; the opinion of my honorable colleagues on the subcommittee is affirmative. From their point of view there is no necessity of a reserve fund which, cooperating with the law of scarcity, shall abridge the period of transition, mitigate or obviate crises, regulate the circulation, inspire confidence and certainty in the efficacy of the reform and afford in one form or another a possible guarantee as to the solidity of the new monetary system. They consider that the reserve fund can never be necessary, and that at the most it may be desirable after, but not before, the practical attainment of legal parity. "Let the monetary law be issued," say they, "let the mints be closed to the free coinage of silver and await the results. If, after the lapse of a reasonable period, the legal parity and the stabilization of exchange are not attained, it will then be time to think of a reserve fund."

VIII. Experimentally this opinion seems to have strong support in the result of the methods adopted by the Indian government to elevate artificially the gold value of the silver rupee to 16d (legal parity) without the aid of a reserve fund, as well as in the official opinion expressed by that government in 1898, to the effect that the rise in the value of the rupee subsequently to 1894–95 "was due to the contraction of the currency, and that the same cause would continue to act in the same direction so long as the mints were closed to silver." Thus it would seem that it might be inferred from that example and that opinion that the mere effect of the law of scarcity or currency contraction would have been sufficient to raise the gold value of the silver rupee to legal parity without the need of a reserve fund.

IX. Nevertheless, the committee appointed by the British Government under the chairmanship of Sir Henry Fowler to study the currency questions of India affirms in its report of July 1, 1899, that "it has not been proved that the rise in the value of the rupee since 1894–95 is due solely to relative contraction of the Indian currency; and it may be that it is not due mainly to this cause. It is not certain that there has been any contraction of the Indian currency which has materially affected the exchange, though it may not unreasonably be inferred that there must have been some contraction and that such contraction has had some influence on the exchange value of the rupee. On the other hand, there are causes other than contraction of the currency which affect the value of the rupee and the exchange with London. Large borrowing in London on account of India, reduction of the drawings of the secretary of state, an increase in the exports from India unaccompanied by an equivalent increase in imports, as well as a general rise in gold prices, would all affect the rate of exchange with India, though it is quite impossible to estimate the relative importance of these factors among themselves, or the amount of their influence on exchange, as compared with the effect of a contraction of the currency, or to state the precise degree of influence which any or all of them have had on any particular alteration in the exchange. Nor, on the other hand, is it certain that the unusually low rate of exchange that prevailed in 1894–95 was due solely to a relative redundancy of the Indian currency. The closing of the Indian mints necessarily brought into play many disturbing influences which may have affected 1894–95. Since the mints were closed, there has also been large borrowing on Indian account, and there have been in some years large reductions below the normal amount in the public remittances from India, while fluctuations have been experienced in the foreign trade of India, due to famine and plague, as well as to other causes.

"All these causes must at different times have affected the exchange either favorably or unfavorably. Another influence which must have had a favorable effect on the Indian exchange is the reduction in the imports of silver due to the closing of the mints. In face of the facts we have just stated, we are unable to accept, without qualification, the opinion that the rise in the value of the rupee since 1894–95 has been due, wholly or mainly to a relative contraction of the Indian currency, and though we accept in principle the proposition that a reduction in the number of rupees tends to increase the value of the rupee, we are not prepared to admit that such effect must necessarily be direct and

immediate; nor are we satisfied that such reduction, carried out on a large scale and within a limited period, might not aggravate, if it did not produce, a period of stringency in the Indian money market."

X. India's example does not, therefore, prove, as at first sight it might seem to, that the closing of the mints and the contraction of the currency, due to the indefinite withholding of new supplies of silver dollars, will suffice to raise the new coin to a legal parity with gold and to stabilize exchange. On the contrary in regard to India itself, in addition to the other causes pointed out by the Fowler committee as factors in the rise of the value of the rupee, we have to take into account the considerable issue of paper money made by the Indian Government, after having deprived the banks of the right to issue notes, the system of drafts on India established by the British Government, on the basis of a gold fund deposited in London and the constant increase in the output of gold from the mines of India, for all these causes which, in the aggregate, tended to curtail the exportation of gold or to increase the country's stock of gold, also tended to augment the gold value of the rupee. Consequently India's example does not seem conclusive in favor of venturing the entire success of monetary reform on nothing but the closing of the mints to the free coinage of silver, especially since that same example has, on the other hand, demonstrated the dangers and inconvenience which that country has passed through during the long transitional period of five years that the rupee required to reach the desired parity, as stated in an official document of the same Government quoted by Fowler as follows: "The government of India is anxious 'both in the interests of the State and of the mercantile community,' to terminate the period of transition without further delay—in the interests of the State, because it would be cheaper in the end to acquire a reserve of gold by borrowing, and thus keep the exchange value of the rupee at a steady level of 16 pence than to bear for years the burden of expenditure entailed by the lower level of the rupee; in the interests of the commercial community because it was not desirable that their legitimate business should be hampered and embarrassed by the uncertainty of exchange, while the want of confidence in the stability of the rupee discouraged the investment of capital in India and available capital was remitted to England whenever the exchange value of the rupee rose to a high level."

XI. It is not easy in official language to lament more eloquently the error committed in trusting to nothing but the influence of the closing of the mints and the scarcity or contraction of the currency to bring about an artificial rise of the silver coins to the legal parity nor more clearly to state the drawbacks and the inconveniences incidental to the lack of an instrumentality for the regulation of the currency, which would have assured confidence in the solidity of the new monetary system and have encouraged the investment of foreign capital. "The creation of a reserve fund," said Professor Conant in his report to the Secretary of War of the American Government on November 25, 1901, "is the most essential of the provisions to maintain confidence in the new silver coins. Whatever may be the burden imposed upon the Government for interest payments in order to form the reserve fund it would be a small price to pay for the security afforded to commerce and the invitation extended by a sound monetary system to the investment of capital with the resulting increase in the taxable property and

the revenues of the islands." And in another part of the same report he says: "The limitation of the quantity of silver coined and the interchangeability of the cheaper metal with the standard metal at the ratio fixed by law are the influences that have operated in the United States to keep at par with gold a mass of silver currency of which the bullion value is far below its face value."

XII. The government of India itself in its dispatch of March 3, 1898, when proposing the withdrawal of 24 million rupees in order to steady the gold value of the rupee at the legal parity, dwelt on the necessity of melting down that sum in bar silver, but "having first provided a reserve of gold both for the practical purpose of taking the place of the silver and in order to establish confidence in the issue of our measures, the first step was to take powers to borrow sums not exceeding in the whole 20 million pounds sterling and at once to remit 5 million pounds sterling in sovereigns to India as a first installment. If exchange remained at or above 16d. there would be no further step. But if, and so long as, the exchange fell below 16d. the government of India would take rupees from its balances, melt them down, sell the bullion for other rupees in India, pay these other rupees into its balances, and finally make good thereto the balance of loss with part of the borrowed gold." These energetic measures will give an idea of the terrible situation through which the country had passed and from which it had not emerged in spite of the fact that since January of that year the rupee had at last attained the parity so tenaciously sought for five years, and though the Indian currency committee did not indorse the proposal of the Indian government, that fact was principally because the large and unlooked-for receipts of gold during the remainder of that year and in 1899 led the committee to prefer the definite establishment of the gold standard with a gold circulation. This project was at once approved by the British Government; the sovereign became unlimited legal tender in India and the mints were thrown open to the free coinage of gold.

XIII. From all these precedents I infer that the closing of the mints to the free coinage of silver and the influence of scarcity value or currency contraction which that closing must occasion can not, if unaccompanied and uncombined with the regulating action of a reserve fund in one form or another, show a satisfactory indorsement in the methods recently adopted by other countries under conditions that may have been similar to our conditions at present, and therefore, in principle and as a general proposition, a reserve fund is an essential requisite in the adoption of monetary reform.

XIV. What would be the object of the reserve fund and what its chief functions?

My opinion is that the reserve fund, in addition to serving as a guaranty for the objects of the law and consolidating public confidence in its results, aims at imparting to the interior circulation the elasticity which it needs and to international exchange a gradual and progressive degree of stability to the end that, during the transition period, the country may not suffer violent monetary contractions and that the market may not be exposed to sudden ebbs and flows owing to the necessity of securing gold to settle its indebtedness to foreign countries. To moderate, to regulate, to abridge the period of transition during which the new coins will be attaining their legal parity, on the one hand, and, on the other hand, to facilitate the remittance

of funds abroad in the money that is the standard of the commercial world, on better terms than would be offered by private interests, are, in brief, what I consider the chief functions of the reserve fund.

XV. It is unnecessary to say that the functions mentioned must fundamentally have for their aim the maintenance of a most important condition for the country's progress, viz., its ability to attract foreign capital through the security offered that further investments effected can at any time be realized in the world's monetary standard. If the studies of the first subcommittee prove anything, it is that in Mexico, as in every new country with large resources awaiting developments, foreign capital enters, and will continue to enter, chiefly in the form of machinery for industrial enterprises, mining, and agriculture, in the form of railway equipment, or in specie for material improvements and for purchases of the public debt, etc., seeing that the sums of money which corporations collect among their shareholders or which are directly invested by private persons are devoted to the acquisition of those instrumentalities of labor necessary for the conduct of their undertakings or to the purchase of securities by means of said capital. As long as these investments continue active there will be an excess of imports for which it will not be necessary to pay by means of a compensating outflow of gold or commodities, save to the extent of a small proportion of the country's production due to importations of this nature; that is to say, in the form of interest or profits, which will always be much less than the sums brought in, so that the country is constantly receiving a great deal more than it pays out. The only danger, or the greatest danger, of this situation lies in the possibility that the current of investment may be suspended or arrested and that the trade balance may suddenly have to be settled in gold, but this danger can only arise as long as the monetary system continues subject to unforeseen fluctuations and possibilities of loss in the transformation into gold of the coin in which returns or interest are paid; that is to say, until such time as the reserve fund shall begin to impart the promised stability to exchange and a progressive and steady approximation to the new legal parity.

XVI. It is not desirable and no one would suggest that the reserve fund should be at once used to exchange the new silver coins into gold at the legal parity, for such a use of the reserve would simply amount to the suppression of the transition period and the implantation of the gold standard with a gold circulation. But the tendency and immediate object of the creation of the fund would be to enable us to advance with firm and ever accelerated steps to the earliest possible attainment of that parity; and therfore all that may conduce, directly or indirectly, to diminish the fluctuations of exchange and the pressure on the stock of metallic money; all that may contribute to render the internal currency more flexible and to secure a supply of the precious metals; all that may tend to defeat surprises or speculative combines inimical to the normal development of the new monetary system should enter into the programme of the reserve fund.

XVII. There is no doubt, as has been pointed out by noted contemporaneous financiers, that a great bank or combination of banks, acting under suitable monetary arangements, would be able to manage such a reserve fund much more effectively and much more in harmony with the commercial necessities of the country concerned than any

official institution however well administered. "If the country's gold reserves," says Professor Andrew, of Harvard University, "were to be concentrated in a great national bank, as they are in Germany, France, and England, the fluctuations of exchange and the ebb and flow of specie might be more easily regulated. In abnormal times such an institution would serve to give stability to the value of silver money by means of borrowings on the London money market or by the sale of letters of exchange on its agents in other countries at lower prices than those which are simply determined by considerations of private gain. It might also put a brake on the tendencies that make for unfavorable exchange conditions by raising the rate of discount, or might limit the exodus of gold, like the Bank of France, by charging a premium on gold bullion or coin destined for shipment abroad."

The conditions surrounding the legal status of our banks in Mexico render impracticable the idea of Professor Andrew save through a radical reform in the organization of those institutions. Their life is purely individual, aiming only at the private gain of their shareholders and the attainment of the highest dividends possible, and they are under no direct obligation to safeguard the public interests. The banks of Mexico are private institutions, operating independently and even antagonistically, actuated by the spirit of competition, and without any thought of the claims of solidarity. They do not constitute an organic entity capable of combined action for any purpose, even for common defense. Each seeks its own safety, its own aggrandizement, by means of its own resources, without concerning itself with the growth and prosperity of the others. Under such circumstances a satisfactory combination of the banks for the purpose of taking charge of the delicate duty of administering the reserve fund is for the present out of the question. Nor would it be wise to confide functions so momentous to a single bank. So the administration of the reserve fund must, in my opinion, be vested in an official institution until such time as the desideratum of banking cooperation shall be attained by means of a new form of organization.

XVIII. Thus the reserve fund, administered by an official institution, would consist of a deposit in gold situated abroad and another deposit, originally in silver, situated within the country, and its modus operandi, or powers, would substantially be as follows:

1. To sell and buy drafts payable in gold abroad.
2. To sell drafts payable in silver in Mexico.
3. To issue in Mexico temporary certificates of indebtedness, constituting a charge upon the fund, payable in silver or gold at short periods from the date of issue, either at a moderate rate of interest or without interest.
4. To receive temporarily surplus funds of the treasury.
5. To buy gold coins or gold bullion at prices not exceeding the cost of their importation from abroad.

XIX. The purchase and sale of drafts payable in gold is one of the most efficacious and useful methods to assure the solidity of the monetary system. Through that power the bank of Java is able to maintain the silver coinage at the old ratio of 15½ to 1. "The bank," says Professor Conant, "never carried more than a trifling amount of gold, but the sale of gold bills on Holland at the usual rate of exchange has for many years maintained the parity of the coins with the gold standard of the Netherlands."

XX. The other methods or powers speak for themselves, as they are the same as those used by the Treasury of the United States to maintain parity between the varied forms of its currency, and they have also been incorporated into the new currency law of the Philippine islands promulgated on March 2 of the present year and of which sections 6 and 8 are as follows:

"SEC. 6. The government of the Philippine Islands may adopt such measures as it may deem proper to maintain the value of the silver Philippine peso at the rate of one gold peso, and in order to maintain such parity between said silver Philippine pesos and the gold pesos herein provided for, and for no other purpose, may issue temporary certificates of indebtedness bearing not more than four per cent interest, payable at periods of three months or more but not later than one year from the date of issue, which shall be in the denominations of twenty-five dollars or fifty pesos or some multiple of such sum, and shall be redeemable in gold coin of the United States or in lawful money of said islands, according to the terms of issue prescribed by the government of said islands, but the amount of such certificates outstanding at any one time shall not exceed ten million dollars or twenty million pesos: *Provided*, That said certificates shall be exempt from the payment of taxes to the government of the Philippine Islands or to any local authority or to the Government of the United States: *And provided*, That all the proceeds of said certificates shall be used exclusively for the maintenance of said parity, as herein provided, and for no other purpose, except that a sum not exceeding three million dollars at any one time may be used as a continuing a credit for the purchase of silver bullion in execution of the provisions of this act."

"SEC. 8. That the treasurer of the Philippine Islands is hereby authorized, in his discretion, to receive deposits of the new silver coins at the treasury of the government of said islands or any of its branches in sums of not less than twenty pesos and to issue silver certificates therefor in denominations of not less than two nor more than ten pesos, and coin so deposited shall be retained in the treasury and held for the payment of such certificates on demand and used for no other purpose. Such certificates shall be receivable for customs taxes and for all public dues in the Philippine Islands, and when so received may be reissued, and when held by any banking association in said islands may be counted as part of its lawful service."

XXI. The portion of the reserve fund in gold, deposited abroad, would, through the sale of drafts against it, serve to prevent congestion in the periodical demand and supply of drafts which at present enables private bankers to speculate in the rise or decline of the exchange rates in anticipation of requirements. The studies of the third subcommittee show that the drafts of the majority of exporters become plethoric in the second half of each fiscal year and grow scarce again in the first half; whereas the remittances of funds for the payment of the coupons of the public debt are characterized by a regularity with which all are familiar. Thus it is noticed in the market that, during certain months of the year, the purchase price of commercial drafts is several points below actual parity, while in other months it is above said parity, occasioning and stimulating the exportation of coin. A careful and far-sighted administration of the reserve fund will correct these irregularities with advantage to the

community; for as its operations will not be actuated by profit it will aim at distributing the demand for the transfer of values on an economical basis and preventing the periodicity of congestion in the supply or the demand in future.

XXII. As will have been observed in the course of this succinct exposition, which the very brief time allowed me, in relation to the importance of the question, has not permitted me to carry into detail or even to complete, the functions of the reserve fund only apply to the period of transition or to the initial period of the monetary reform, the period during which the new coin will gradually be approximating legal parity. When that parity shall have been once attained, the importance of the fund will cease to exist, for then the gold standard with gold in circulation will have been ushered in and the system will operate automatically and with entire stability.

Such are my opinions and I respectfully submit them to my honorable colleagues on the fifth subcommittee.

G. Raigosa.

Mexico, *November 5, 1903.*

Annex No. 5.—Report of Messrs. José de Landero y Cos and Carlos Sellerier.

Fourth question.—Is it advisable to counsel the adoption of special measures such as the abolition or diminution of taxes and the like, that will save not only the silver-mining industry but export industries in general from the losses that might accrue to them from a change of monetary system in the Republic?

In compliance with the task assigned to us by the fifth subcommittee we hereby report as to the points submitted to us:

The mining industry and export industries will suffer a loss equal to the difference between the rate of foreign exchange in force before the projected monetary reform becomes operative and the rate to which exchange will fall as a consequence of that reform, which will be in the neighborhood of 200 per cent on New York, accepting the hypothetical basis of 1 to 32 as the relation between the new gold and silver coins. Supposing that the present rate of exchange, 219 per cent on New York, were to prevail just prior to the monetary reform, the loss would be 19 in 219 or 8.68 per cent minus one-fourth part in the case of mines, owing to the consumption of foreign and native articles therein, according to the calculations of the second subcommittee, leaving 6.51 per cent. This percentage would be liable to increase or diminution according to the subsequent decline or rise of the price of silver in foreign markets.

In order to afford some relief to mine owners and the growers of exportable agricultural products for this loss, we beg leave to suggest that the fifth subcommittee, in submitting to the finance department the project of monetary reform, should entreat that department to ask the Federal Congress to approve the suppressions and reductions of taxation set forth in the accompanying memorandum.

As the fifth subcommittee well knows, one of the undersigned is not in favor of monetary reform; but being a member of the fifth subcommittee he considered himself in duty bound, when discussing the

bases of said reform, to express his opinion with sincerity and frankness in regard to each of those bases.

We renew to you the assurances of our courteous consideration.

JOSÉ DE LANDERO Y COS.
CARLOS SELLERIER.

MEXICO, *October 26, 1903.*

MEMORANDUM OF THE SUPPRESSIONS AND REDUCTIONS OF TAXATION SUGGESTED ON BEHALF OF THE MINING AND EXPORT INDUSTRIES TO SYNCHRONIZE WITH THE REALIZATION OF THE PROJECT OF MONETARY REFORM.

Reduction of the annual tax on mines of silver, gold, and platinum, established by article 4 of the law of June 6, 1892, from $10 to $5 per claim (pertenencia).

Suppression of the 3 per cent stamp tax on the value of silver and gold, established by the budget law and by Section I, article 1, of the decree of March 27, 1897.

Reduction from 2 to 1 per cent of the coinagetax on the value of silver, established by the budget law and by Section II, article 1, of the decree of March 27, 1897.

Reduction from 2 per cent to one-quarter per cent of the coinage tax on the value of gold, established by the budget law and by Section II, article 1, of the decree of March 27, 1897.

Reduction from $1.25, $2, $2.50, and $3 per kilogram to $1 per kilogram of silver separated, of the dues on the separation of gold fixed by the tariff of March, 1897, attached to the rules of practice of the decree of the same date.

Exemption for ten years from all Federal, State, and municipal taxation, with the exception of the stamp tax, for the owners of mines producing mineral substances not hitherto exploited in the Republic and of which the minimum output shall be 1,000 tons of ore per annum.

Exemption from import duties on the following articles largely used in mines and metallurgical works and of which some already enjoy such exemption under the existing custom-house tariff:

Sulphuric acid; quicksilver; sulphur in the rough, smelted, or sublimated; hard coal; alkaline cyanides; coke; hyposulphite of soda; soft coal; machinery and apparatuses for mines and metallurgical works; nitrate of potash or soda; sulphate of copper; zinc in pigs, filings, grains, or in the filiform state.

Removal of export duties on the agricultural products at present subject to those duties.

ANNEX NO. 6.—OBSERVATIONS OF LIC. JOAQUIN D. CASASUS IN REGARD TO THE OPINION OF LIC. GENARO RAIGOSA.

MEXICO, *November 12, 1903.*

To Sr. Lic. Don. PABLO MACEDO,
Chairman of the Fifth Subcommittee, City.

MY DEAR FRIEND: It has caused me the deepest regret not to be able to share the opinions which you have been maintaining in the deliberations of the fifth subcommittee, and I have formed the resolve not to

attend any of the forthcoming sessions that may be held for the purpose of discussing the report presented by our colleague and friend, Sr. Lic. Genaro Raigosa.

The regret which I experience at not being able to share your opinions is easily explicable. From the time when you were my master until now I have been wont to bow respectfully to your opinions and hardly ever has there been any divergence of convictions between us; on the contrary, each day has brought forth new ties that have more closely united and identified us.

It has, therefore, been extremely grievous to me not to concur in the ideas which you have been championing in the discussions of the fifth subcommittee and to have been constrained to combat them at each of the sessions which I have attended, and, what is worst of all, to combat them with the perhaps excessive vehemence which I am in the habit of putting into the defense of my personal convictions.

The decision which I have reached is, however, no reason why I should not acquaint the fifth subcommittee in a written form with the ideas which I hold in regard to the problem that is absorbing the attention of all of us, and if my avocations leave me time I will frame a brief and simple report and will send it to you, that it may be added to the records of the subcommittee.

Nor will my resolution prevent me from formulating some observations as to the report of Lic. Genaro Raigosa, for it seems to me that in doing so I am giving him a proof of the great interest which I feel in the very important document presented by him to the fifth subcommittee.

My observations will be very brief and are as follows:

I. The reserve fund ought preferably to be created in Mexico and ought to consist exclusively of gold, and instead of issuing drafts on foreign points it ought rather to confine itself to supplying gold for exportation.

It would seem to be the opinion of all of our colleagues that the reserve fund should not be so administered as to convert it into an exchange bank, properly so called, destined to compete with the banking institutions of the country. It has been maintained, and, as I think, rightly maintained, that the reserve fund should only be brought into action in extreme cases and should not be operated so as to interfere with commercial transactions. This object can only be attained if the body controlling the fund confines itself to supplying gold for exportation, for without doubt gold will only leave the country if, after offsetting our debit and credit abroad, it shall be found necessary to pay a balance to our foreign creditors.

If the fund is to serve exclusively as a guaranty for the currency and is destined to afford elasticity to that currency, it will be found of the utmost importance to confine the primary object of its existence to the function I have just mentioned. Exchange operations will continue to be effected in the same way as hitherto, the banks will continue to be the intermediaries between foreign and native merchants, and the fund will only come into play by supplying gold for circulation when the necessity therefor arises.

If the object sought by the fifth subcommittee is what I think it is, it will be easy to regulate the service of the fund and lay down the rule that bars of gold or Mexican coins of the new issue will only be supplied upon payment, in any event, of a commission of 1 per cent

and that gold will only be paid out in return for an equivalent quantity of dollars of the new issue.

II. It seems to me dangerous to invest the body controlling the fund with powers to issue certificates of indebtedness on time, payable in silver or gold, with or without interest.

If we desire to impart to the reserve fund a character of real solidity, it must in no case be made the basis of credit operations. The fund should consist of gold alone and should only part with it in exchange for silver coins of the new issue.

We can not have recourse to systems employed by the United States, for, on the one hand, our Government does not unfortunately enjoy the same degree of credit as the American Government, nor, on the other, is it possible for us to offer as a guaranty for the success of the monetary reform any confidence that our Government may be capable of inspiring for a long period of time.

The American Government in the law dealing with the Philippines' currency instead of issuing a loan and setting up the reserve fund with the proceeds thereof, empowered the corporation controlling the fund to secure gold by means of certificates of indebtedness. My belief is that our Government would prefer to issue a loan and set up the fund with its proceeds rather than authorize the body controlling the fund to make use of its credit.

On the other hand, short-time gold securities could not be issued in the interior of the country, and if they were to be issued abroad it were better, on every account, that the Government should undertake a direct emission of long-time securities.

I see no reason why the management of the fund should be empowered to issue certificates of indebtedness in exchange for silver, for the only silver entering the fund will be that which is withdrawn from the circulation in exchange for gold. Save and except for that purpose there would be no object in adding a stock of silver to the fund.

Among the measures to be put in practice during the period of transition, mention has been made of the emission of certificates for dollars of the new issue; but my view of the matter is that these certificates will only be issued in exchange for dollars of the old issue, and that the exclusive object of the measure is to make provision for the insufficient capacity of our mints, which assuredly could not in a short period of time coin the quantity of dollars that will be necessary to replace the dollars at present in circulation.

These are the only observations which I should have to formulate with respect to the report of Mr. Raigosa.

I avail myself of this opportunity to offer you a renewed assurance of my high and unvarying regard.

JOAQUIN D. CASASUS.

ANNEX No. 7—REPORT OF LIC. JOAQUIN D. CASASUS.

SIR: The discussions that have taken place at the sessions of the fifth subcommittee have impressed upon me the conviction that some of its members do not share my opinions in regard to the means that should be put in practice in order to afford a correct solution for the monetary problem that is absorbing our attention.

Inasmuch as each of the various members of the fifth subcommittee had in advance made a serious study of the monetary question and had found in such study the ground for his opinions, it can not be expected that those opinions should now be modified and become uniform or that a given project should command unanimity of assent.

It is therefore the duty of each and every one of the persons, to whom the consideration of the monetary problem was referred by the department of finance, to formulate his opinion and give his reasons for it.

Moreover, this was the specific desire of the department of finance and public credit in appointing the monetary commission, for the circular of February 4, of the current year, explicitly stated that the Government did not expect the monetary commission to give an opinion in the form of an unanimous or majority vote, but that it merely sought to learn the individual views of the various persons whose cooperation had been invited, so that it might be in a position better to solve the grave economic questions which it had before it.

The necessity of formulating my opinion and the expedience of stating my reasons therefor impel me to bespeak for a few brief moments the attention of the members of the fifth subcommittee, whose duty it is to lay before the commission in full session the bases for a new monetary system in the Republic and the measures that should be adopted to secure fixity of international exchange.

The report which I presented, together with Eng. Manuel Fernandez Leal, director of the mints, contains my views in regard to the new monetary system which it behooves us to adopt. In consequence I must only address myself now to the consideration of the questions that are more directly connected with the stabilization of international exchange.

The aim of the Government of the Republic, in modifying its monetary system, is to impart fixity to foreign exchange, and it desires to attain that end in order that the varied forms of our public wealth may not again be affected by a new and still heavier depreciation of silver in the future, and that the evils and dangers inherent to constant oscillations in exchange may hereafter be obviated.

The measures on which, in my opinion, the monetary reform must be based are threefold:

I. The suspension of the coinage of unlimited legal tender silver on private account.

II. The creation of a gold guaranty fund of which the object shall be to regulate the volume of coin in circulation and maintain the parity of international exchange at the ratio provided by law.

III. The opening of the mints to the free coinage of gold.

I hold that the mere suspension of the coinage of our present silver dollar, though it would tend here, as it has in other countries, to dissociate the value of the silver coin from the value of silver bullion as a commodity on the London market, would not at once raise the value of that coin to legal parity with gold, and thus the success of the monetary reform and the desired stabilization of international exchange would be compromised.

The inefficacy of the measure would be due not so much to the special circumstances of our country as to the natural effects which the suspension of silver coinage has produced in every country, de-

pending on the greater or less amount of gold held by the banks or used for circulation.

The scarcity of coin, which would be the only effect due to suspension of coinage, would, it is true, tend of itself to enhance its value; but as that enhancement would have to be the work of time and the enlargement of currency requirements, unaccompanied by an increased coefficient in the rapidity of its circulation, the result would be that the stabilization of exchange would not at once be attained, and the lack of immediate success would disqualify the country from attracting a large volume of foreign capital, without which it would have no other recourse for the settlement of its trade balance than to use for that purpose a coin which could only become exportable by reconversion into a commodity, subject to all the fluctuations to which the price of that commodity is exposed in the world's markets.

The possession of a greater or less amount of gold is, therefore, an indispensable condition if the suspension of the coinage of silver is to produce automatically all its effects; and seeing that there is no gold in circulation here, it becomes necessary to establish a gold fund whose functions shall be identical to those which gold would perform if it circulated in the country, and whose aim will, therefore, be to compensate the lack of a gold circulation.

If the object of the gold guaranty fund is to assure at once the fixity of exchange, there can be no objection to opening the mints to the free coinage of gold, for if currency requirements shall demand a larger supply of monetary units, commercial interests will introduce gold into the country, and as soon as it begins to be coined absolute certainty will exist that the nation, in the long run, will pass with ease from silver monometallism to gold monometallism.

In order to prove the truth of my assertions I proceed to study as briefly as possible the history of the suspension of silver coinage, the results obtained thereby in countries which have had recourse to that measure, and the various causes to which their success is to be ascribed.

All the nations which, since 1873, have sought to ward off the effects which the depreciation of silver was liable to produce in their silver currencies have had recourse to the suspension of the coinage of silver on private account in case the open and resolute adoption of gold monometallism did not seem to them to be possible nor conducive to their interests.

Gold was adopted as the standard, perhaps as a result of the resolutions adopted by the international conference of Paris in 1867; by the German Empire, under the laws of December 4, 1871, and July 9, 1873; by the United States by act of February 12, 1873; by the Scandinavian states under the monetary convention of May 27, 1873, which was the basis of Norway's currency law of June 4, 1873, and by Japan under the law of March 26, 1897.

The following nations successively suspended the free coinage of silver on private account: Holland, provisionally, on May 28, 1873, and definitely on December 9, 1877; France, which by laws of January 31, 1874, and April 26, 1875, first limited that coinage and afterwards by decree of February 26, 1876, suspended it; the other nations of the Latin Union, in 1875 and 1876; Austria, in 1879; India, by act of June 26, 1893, and Russia, by ukase of July 16, in the same year.

The fundamental difference between these two classes of measures lies in the fact that whereas the countries which adopted the gold standard demonetized silver and proceeded to withdraw immediately all the coins of that metal in circulation, the nations which suspended the coinage of the white metal on private account retained all their existing silver coins in circulation, investing them artificially with a value equal to the gold coins at the parity provided by their monetary legislation.

As the results achieved by countries which have suspended the free coinage of silver on private account are said to have been due exclusively to the nature and scope of that measure, it becomes necessary to study it closely, for it constitutes a most admirable device whereby nations without foregoing the services which their silver coins in circulation are capable of rendering to them have, nevertheless, succeeded in attaining fixity of international exchange.

The suspension of silver coinage is a measure only recently adopted by civilized nations, and for that reason it has not hitherto been studied as closely as it deserves to be, and no endeavor has been made to determine its scope and importance from the standpoint of economical principles.

Prior to the depreciation which the yellow metal underwent as a consequence of the discovery of the rich gold fields of California and Australia, the European nations either coined simultaneously the two precious metals, gold and silver, at a predetermined ratio or, according to their preferences, adopted one or the other of the metals as the basis of their monetary systems.

The monetary systems of that date were either monometallic or bimetallic, but in either case the metal or metals chosen to do duty as money operated automatically, were coined freely on private account and always circulated as unlimited legal tender.

Thus the scientific foundation on which all monetary systems rested was the free coinage of the metal or metals selected to act as money and the unlimited legal-tender capacity with which said metal or metals were invested.

In the last third of the nineteenth century there appeared what many persons have called the "third system," whereby nations that were previously under the bimetallic régime have retained their silver money as unlimited legal tender, though depriving private persons of the right to have it coined on their own account at the mints.

This third system has in consequence repudiated a fundamental principle to which every sound currency ought to conform.

In point of fact every sound currency ought to be coined freely on private account and to be legal tender. It must be unlimited legal tender, for if it is not it can not be received in payments nor extinguish the obligations which men reciprocally contract. And its mintage on private account must be free, for thus alone can the quantity of currency that should circulate be fixed; thus alone can that quantity be augmented in proportion as the nation's progress enlarges the field for its use; and thus alone, in fine, can the currency always be an exportable article, destined to act as the regulator of internal and foreign commerce and be coined or melted according to the exigencies of international trade relations.

If this third system, which has been picturesquely called the "limp-

ing standard," repudiates one of the economical principles that has ever been the foundation of a good currency, it affords, on the other hand, a device which has enabled silver coins to continue circulating as unlimited legal tender, despite the enormous and ever-widening disparity between the commercial values of the two precious metals, gold and silver.

But does this third system deserve to be called a "system?" Could it be adopted by nations permanently on the same footing as other systems based on the principles of economical science?

The mere fact that a legislative measure, which any nation may adopt, violates the basic principles of a good currency suffices to deprive that currency of any claim to be considered as a monetary system properly so called. It can only rank as a transitional measure, destined not to serve as the basis of a permanent system, but as a link between silver monometallism and gold monometallism, or between bimetallism and monometallism.

The origin of the suspension of silver coinage gives us an insight into the object had in view thereby.

The depreciation which gold underwent in the decade from 1854 to 1864 impelled the nations to demonetize it; and when the depreciation of silver in relation to gold set in, the same nations experienced the necessity of eliminating silver from their monetary circulations.

However, as it was not possible for the nations to continue changing their monetary systems backward and forward so as always to have the dearer metal as their standard, whenever a change in the commercial value of the precious metals occurred, certain powers decided to suspend the coinage of the white metal for the twofold object of protecting their commercial future and securing time to see whether the depreciation of silver would prove temporary, as the depreciation of gold had been, or would be permanent and of such proportions as to rob silver of its usefulness for monetary purposes.

Thus the idea that the depreciation of silver, due to Germany's monetary reform, might prove transient rather than lasting, originated the legislation which in Holland, France, and other nations of the Latin Union suspended the coinage of silver on private account.

Unfortunately the depreciation of silver, instead of being transient, proved permanent and became more and more accentuated, until the disparity between the legal value of the circulating silver coins in nations which had suspended the free coinage of silver and the commercial value of silver bullion on the London market became enormous.

Hence the nations, especially those nations which had a large quantity of silver coins in circulation, have either been unable to bear the loss that would have been entailed by exchanging those coins for gold at the legal parity or they have found it impossible to secure the gold on account of the heavy demand of the civilized world for that metal during the last thirty years. Owing to this fact, what ought only to have been a transitional measure of a more or less brief duration has become the basis of a regular system; but though in the case of some nations it shows outward signs of permanence, it will in the end prove to have been only a natural step toward the monetary régime of which gold is the sole and exclusive basis.

All that has been said goes to establish the fact that the suspension of the coinage of a metal on private account, while retaining the coins made of that metal in circulation as unlimited legal tender, is not a monetary system at all, but a transitional measure in the evolution from silver monometallism or bimetallism to a currency chiefly composed of coins made of the metal adopted as the new standard.

But although this measure can not be permanently embraced as if it were in reality a monetary system, it has not failed to produce the results which the nations set before themselves when they adopted it.

What are those results?

The suspension of the coinage of a metal differs from its demonetization in that under the latter régime all coins made of the demonetized metal are withdrawn and in the other case the coins continue to circulate as before as unlimited legal tender.

From this it will be understood that the effects of a change of standard and the effects of the suspension of a metal's coinage on private account must be distinct.

The mere change of monetary standard only affects the commercial value of the metal demonetized, whereas the suspension of coinage, independently of its influence on the value of the metal, brings about a divorce between the value of that metal as bullion and the value of the coins of that metal which remain in circulation.

The change of standard affects the value of the discarded metal both because it diminishes the demand therefor (seeing that it is no longer required for monetary uses) and because it increases the supply, seeing that, as a general rule, the old coins thereof, which are withdrawn, are sold as bullion by the government making the change.

The suspension of coinage, though also affecting the value of the metal as a commodity, affects it only through limitation of the demand, which perforce will be more restricted than formerly.

But the difference does not lie in the influence exercised on the value of the metal but in the disassociation established between the value of the metal as a commodity and the value of the metal as a coin, a disassociation due to the fact that while the value of the metal as a commodity tends downward, the value of the metal as a coin experiences a necessary enhancement.

How does that disassociation take place?

The phenomenon is easily explained. The value of the metal on the market ceases to affect the value of the metal from which are made the coins remaining in circulation; while the former declines, on account of its greater plentifulness or the curtailed demand, the latter rises on account of its greater scarcity in relation to constantly increasing currency requirements.

As every progressive country needs constant additions to its currency and as when free coinage has been suspended those additions are not forthcoming, the result is that the enlarged demand is met by an unaltered supply, and by virtue of the law of supply and demand the coins in circulation will appreciate daily, their value increasing in proportion as the want of them becomes more pressing.

There is, however, a factor that tends to counteract this natural operation of the law of supply and demand. As the coins in circulation enter daily into a successive series of transactions, currency requirements do not depend exclusively on the progress of nations

and the volume of their business, but also on the greater or less degree of rapidity with which the currency can be made to do duty for the purposes of trade.

The coefficient of rapidity of the monetary circulation is, therefore, an element that must be taken into account when studying the effects of the scarcity value of a currency.

If the restriction of the quantity of coins in circulation through the suspension of coinage on private account is compensated by a higher coefficient of rapidity in circulation, it is unquestioned that the effects of scarcity value will not be felt and that the value of the coins in circulation will not be raised.

Thus when an endeavor is to be made to raise the value of the coins in circulation merely through the suspension of free coinage, it is necessary first to be sure that an acceleration of the circulation will not counteract the natural operation of the law of scarcity.

In consequence, the disassociation between the price of a metal as a commodity on the markets of the world and the value of the same metal as a coin in the internal circulation of a country will only be attained when it is possible to enhance the value of the metal as a coin through scarcity, and that enhancement will only take place when the increase in the rapidity of circulation is not sufficient to neutralize the ever-increasing expansion of currency requirements.

Furthermore, the disassociation that may be brought about between the value of a metal as a commodity and the value of the same metal as a coin in a country's internal circulation, may be stable or unstable. Its attainment does not assure its permanence; on the contrary, it may easily disappear if the normal conditions of the internal circulation are interfered with.

Now, when will it be stable and when will it be unstable?

Stability of the effects that flow from the mere suspension of silver coinage on private account can only be secured when the trade balance is favorable, and it will disappear as soon as the trade balance compels the nation to pay the debt of its international transactions in the circulating medium.

These facts are so easily comprehensible that they do not require explanation. Coins made of a metal whose free coinage has been suspended are not coins of full value, but of an artificially raised value, and, consequently, they are not exportable. They rather resemble the subsidiary coins which, being of less fineness than the unlimited legal-tender coins, are restricted to the internal circulation from which they should never part; or, rather, they are more like bank notes which can only circulate in the localities where they can at pleasure be converted into coin.

If a coin has greater value in the interior of a country than it possesses as bullion abroad, it can never be exported save as a commodity, and when exported it will lose the higher value with which it had been invested in the internal circulation, and thus the barrier between the value of the metal as a commodity and the value of the metal as a coin will break down.

The suspension of the free coinage of silver can only maintain the enhanced value of a coin in internal markets if the balance of trade does not constrain the nation to export its circulating coins.

When the necessity of settling an international trade balance in coin forces the exportation of the precious metals, the effects of the mere suspension of the free coinage of silver will be nullified and all the results attained thereby will disappear.

The history of the suspension of the free coinage of silver in the last quarter of the nineteenth century proves the truth of these assertions and shows the causes to which the results obtained in Europe, America, or British India are due.

The suspension of the free coinage of silver has occurred under two different conditions:

I. With a stock of gold coins, large or small, either in circulation or held by governments or banks.

II. Without a stock of gold coins.

The results that have been secured under these two different conditions may be studied either in the light of normal circumstances and a favorable trade balance or in the light of circumstances that necessitate the settlement of a trade balance in the precious metals.

When there is a stock of gold coins, either in circulation or held by the banks or public authorities, whether that stock be great or small, the effects of the suspension of free coinage become operative immediately; the value of the silver coins in the country's internal circulation becomes at once equal to that of the gold coins, at the ratio provided by the monetary laws; international exchange settles near parity and stays there with relative stability.

These phenomena are easily explainable. The value of the silver coins, in spite of the decline of silver bullion on the market for the precious metals, stands at an equality with the value of the gold coins at the ratio fixed by law:

1. Because, owing to their scarcity, the value of the silver coins tends to rise;

2. Because the silver coins may easily be exchanged at par for gold; and

3. Because currency requirements, not satisfied with the quantity of silver coins on hand, tend to retain gold in circulation, notwithstanding the higher commercial value of the latter metal abroad.

The fixity of exchange at the nearest possible approach to legal parity is assured:

1. Because, inasmuch as gold is available for shipment abroad, there exists in reality an exportable coin for the contingency of an adverse trade balance; and

2. Because, by means of various artificial devices, such as coinage dues or premiums charged on gold for exportation, it is possible to hold gold back, so that it may be exported on the smallest scale possible, which aids the natural tendency which nations feel to maintain the equilibrium of their foreign trade.

When there are no gold coins in circulation and none held by the banks or by the government, it is possible, sooner or later, by means of currency contraction, to raise the value of the silver coins to legal parity with gold; but the fixity of exchange can not be maintained in the event of an adverse trade balance, for as there are no gold coins to export and as it thus becomes necessary to settle the balance with silver coins, the latter will again become a commodity, subject, as formerly, to the fluctuations of silver bullion on the world's markets.

As will be seen, there are various fundamental differences between the effects which the suspension of silver coinage produces according as there is or is not a stock of gold coins either in circulation or in reserve.

In the first place, when there is a stock of gold, the value of the silver coins will rise automatically to legal parity, due rather to the interchangibility of the two metals than to the scarcity value of the silver coins.

When there is no stock of gold coins, the appreciation of the silver coins must be the work of time and the gradual enhancement of the currency through contraction.

In the second place, when there is a stock of gold coins, exchange is maintained as near as possible to parity because there is always an available supply of exportable coins wherewith to settle an adverse trade balance; whereas, if such coins are lacking, the system breaks down and the currency suffers inevitable derangement.

Two instances may be cited as the best proof of these assertions—viz., the currency reform carried out by Holland between the year 1873 and the year 1877, and the currency reform effected in India by virtue of the law of June 26, 1893. The reform in Holland, whereby the free coinage of silver was suspended, was effected concurrently with the holding of a supply of gold, though a very scant one, by the Bank of the Netherlands, while in the case of India there was an absolute lack of gold coins.

Holland suspended the coinage of silver on private account, first provisionally and afterward definitely.

When that country initiated the currency reform the stock of gold florins in the Bank of the Netherlands was 27,833,079, and exchange on London, based on the value of silver in the London market, showed a difference of almost 6 per cent above legal parity.

We may divide the period in which the currency reform was effected into three periods: From January to September, 1874; from April, 1875, to May, 1876, and from October, 1876, to October, 1877.

In the first period silver fell on the London market from 59d., at which the ratio between gold and silver is 1 to 15.98, to 57⅝d., showing a ratio of 1 to 16.36.

The exchange at Amsterdam on London at that time was 11.86 florins as a minimum, rising to 11.93.

In the second period the price of silver fell from 57¼d., equivalent to a ratio between gold and silver of 1 to 16.47, to 52½d., at which the ratio is 1 to 17.96; and yet the rate of exchange at Amsterdam on London oscillated between 11.72 florins, minimum, and 12.11, maximum.

In the third period the price of silver rose from 51⅜d. to a maximum price of $57\frac{11}{16}$d., thereafter receding to 54¾d., and the exchange between Amsterdam and London was maintained between 12.1½ as a minimum and 12.12 as a maximum.

The divorce effected between the value of the silver contained in the Dutch florin and the value of silver bullion on the London market, coupled with the small gold stock of the Netherlands Bank, sufficed to maintain relative parity of exchange between Amsterdam and London, more or less at a ratio, between the gold of the English sovereign and the silver of the florin, of 1 to 15.55.

The stock of gold and silver in the Bank of the Netherlands in the period from December, 1871, to June, 1877, showed the following oscillations:

Date.	Gold.	Silver.
	Florins.	*Florins.*
December, 1871	5,522,513	138,301,458
June 1872	27,969,273	125,946,177
December, 1872	27,969,273	92,863,525
June, 1873	27,833,079	78,078,371
December, 1873	39,972,292	68,521,280
June, 1874	56,297,559	76,958,547
December, 1874	55,297,886	82,216,088
June, 1875	61,180,968	80,180,888
December, 1875	69,250,690	89,517,731
June, 1876	64,457,302	97,527,588
December, 1876	64,257,952	89,261,289
June, 1877	74,792,866	76,841,035

The foregoing table illustrates the success of the currency reform; for not only did the stock of silver steadily diminish in proportion to the increase in the stock of gold, but starting with a sum which, proportionately, was almost insignificant, the stock of gold rose until it amounted to 95 per cent of the stock of silver.

The suspension of the coinage of silver and the free coinage of gold had not only disassociated the value of silver coins from the value of silver bullion, but had attracted gold into circulation and the favorable rates of exchange had retained it there, assuring to the fullest extent the legal parity between gold and silver.

Nevertheless, currency conditions underwent a perturbation and the rate of exchange became unfavorable to Holland; and had it not been for the considerable stock of gold accumulated by the Bank of the Netherlands the success of the monetary reform would have been converted into failure. When Holland's turn came to export the precious metals she had recourse to gold, and the stock of that metal in the Bank of the Netherlands was drained to the lowest limit.

The following table shows the stocks of gold and silver held by the banks in question in the months of June and December from 1877 to 1882:

Date.	Gold.	Silver.
	Florins.	*Florins.*
December, 1877	50,509,237	76,867,697
June, 1878	44,298,531	70,639,252
December, 1878	44,634,172	77,217,843
June, 1879	68,887,689	77,260,300
December, 1879	73,425,259	80,901,513
June, 1880	80,378,866	81,350,905
December, 1880	56,861,791	84,844,426
June, 1881	50,440,142	89,646,566
December, 1881	18,158,479	89,035,713
June, 1882	21,868,007	92,043,530
December, 1882	5,272,728	92,347,767

The foregoing table shows that between June, 1880, and December, 1882, the stock of gold dwindled from a little more than 80,000,000 florins to 5,272,728 florins.

Holland's monetary reform, therefore, achieved the desired object, thanks to the stock of gold held by the Bank of the Netherlands,

which facilitated the maintenance of exchange not only under normal conditions, but also in the presence of an adverse trade balance. The Dutch merchants were always able to obtain gold readily for purposes of exportation, and the natural operation of the phenomena of exchange has enabled that country to accumulate gold when exchange was favorable to her and to settle her balance therewith when exchange became adverse.

The system is pronounced by Dutch economists not to be exempt from danger, because, as it has been impossible to withdraw all the silver coins from circulation and to exchange them for gold, it rests upon a fiction; but it is unquestioned that if its dangers have been reduced to a minimum and Holland has been enabled to maintain stability of exchange for a period of thirty years, those facts are due to the stock of gold, inconsiderable though it has been, and to the facility with which gold has been furnished for exportation by the Bank of the Netherlands.

India's monetary reform was accomplished by virtue of the law of June 26, 1893, which closed the Indian mints to the free coinage both of gold and silver, while authorizing the mints to receive gold in exchange for silver at the rate of 16d. per rupee or 15 rupees per pound sterling.

The monetary reform in India was not at once attended with the results which its authors had anticipated, and the rate of exchange provided by law was not in reality attained until the year 1898–99.

The following table shows a series of years, with the mean rate of exchange and the value of the standard ounce of silver in pence in each of those years:

Years.	Exchange.	Standard ounces of silver.
	Pence.	*Pence.*
1887–88	16.898	44 [illegible]
1888–89	16.379	42 [illegible]
1889–90	16.566	42 [illegible]
1890–91	18.089	47 [illegible]
1891–92	16.733	45 [illegible]
1892–93	14.985	39 [illegible]
1893–94	14.547	35 [illegible]
1894–95	13.101	38 [illegible]
1895–96	13.638	29 [illegible]
1896–97	14.451	30 [illegible]
1897–98	15.354	27 [illegible]
1898–99	15.978	26 [illegible]

The aim of the government of India was not only to disassociate the value of the rupee and the value of silver bullion, but to raise the value of the rupee to 16d.

The primary object, viz., to disassociate the price of the rupee from the price of silver bullion, was attained at once, for undoubtedly the price of exchange did not follow the fluctuations of the price of silver bullion; but the contraction which the currency was to have undergone to raise the value of the coins in circulation did not occur, or, if it did occur, it was incapable unaided of bringing about the desired consummation.

What prevented the failure of monetary reform in India was doubtless the favorable and ever-increasing balance of its foreign trade, a balance due partly to the increased value of the exportations, partly

to the loans negotiated in England on India's account, and partly to the steady investment of foreign capital which did not altogether shun the Indian field. Had it not been for those special circumstances, which could only occur in the case of India, the mere suspension of the coinage of silver, without gold coins either in circulation or in the coffers of the banks, would have left the price of the rupee once more at the mercy of the price of silver bullion in the event of an unfavorable trade balance, and would have compelled India to settle in silver the balance in its commercial relations with foreign countries.

The instances cited prove the principles previously enunciated and illustrate the natural scope of the mere suspension of silver coinage.

Summing up what has been said, we may lay down:

I. That the suspension of silver coinage merely tends to establish a disassociation between the value of the metal and the value of the coins made therefrom.

II. That the suspension of the coinage of silver tends to raise the value of the silver coins in circulation on account of their scarcity.

III. That the operation of the law of scarcity may be neutralized by an increased coefficient of rapidity in monetary circulation.

IV. That the disassociation which the suspension of free coinage establishes between the value of the coin and the value of the metal of which that coin is made is only stable when unfavorable exchange conditions do not necessitate the exportation of the coin which has been invested with an enhanced value in the internal circulation.

V. That even though the silver coins are not exportable the disassociation may be lasting and may impart fixity to exchange, provided there is a stock of gold either in circulation or in the coffers of the banks.

Applying these principles to Mexico, it will be easy to show that though the suspension of the coinage of unlimited legal-tender silver on private account is the first and basic measure of currency reform, it must, in order to produce the beneficial results expected from it, be supplemented by the creation of a gold guaranty fund whose object will be to regulate the volume of coin in circulation and maintain the parity of international exchange at the ratio established by law.

The suspension of the free coinage of silver would not suffice to stabilize international exchange:

1. Because Mexico, despite the progress which it has achieved, absorbs annually a very slight quantity of coin, and therefore the enhancement of the value of the circulating medium would have to be the work of a great many years.

2. Because in Mexico a scarcity of currency would be more than compensated by an increased coefficient of the rapidity of its circulation.

3. Because, although Mexico produces gold, there is no gold in circulation and no stocks of that metal accumulated in the banks.

4. Because Mexico has an adverse trade balance and only settles same by means of the foreign capital that seeks investment in the country.

Mexico really absorbs a very small quantity of coin annually.

As the Mexican dollar, besides acting as currency at home, is also an international trade coin, it is exported as a commodity. From the total quantity of silver coined it is therefore necessary to deduct

the quantity of Mexican dollars exported in order to get an idea of the amount absorbed for purposes of circulation.

Among the statistical tables published by the secretary of the commission is one that relates to the coinage of silver and the exportation of Mexican dollars, and the facts derivable from said table are conclusive.

The table is as follows:

Years.	Coinage of silver.	Exportation of coined silver.	Difference between exportation of coined silver and total coinage.
1877-78	$22,084,203	$18,120,296	$3,963,907
1878-79	22,162,988	16,366,877	5,796,111
1879-80	24,018,529	16,783,317	7,235,212
1880-81	24,617,395	13,183,954	11,433,441
1881-82	25,146,260	11,607,888	13,538,372
1882-83	24,083,922	22,969,583	1,113,339
1883-84	25,377,379	25,999,875	622,496
1884-85	25,840,728	25,394,262	446,466
1885-86	26,991,805	21,969,957	5,021,848
1886-87	26,844,031	21,955,759	4,888,272
1887-88	25,862,977	16,841,117	9,021,860
1888-89	26,031,223	22,686,337	3,344,886
1889-90	24,328,326	23,084,489	1,243,837
1890-91	24,237,449	17,622,171	6,615,278
1891-92	25,527,018	26,478,376	951,358
1892-93	27,169,876	27,170,865	989
1893-94	30,185,612	17,386,338	12,799,274
1894-95	27,628,981	17,077,119	10,551,862
1895-96	22,634,788	20,377,663	2,257,125
1896-97	19,296,009	14,578,958	4,717,051
1897-98	21,427,057	18,214,989	3,212,068
1898-99	20,184,117	14,116,935	6,067,182
1899-1900	18,102,630	10,872,874	7,229,256
1900-1901	18,290,390	16,132,879	2,151,511
1901-2	24,509,850	11,351,765	13,158,085
	602,283,543	468,344,443	137,389,056

TRANSLATOR'S NOTE.—It will be noticed that in some of the years exportation exceeded coinage.

Before drawing conclusions from the figures contained in the foregoing table, I must observe, as the third subcommittee had previously done in its report, that the returns for the quinquennial period 1877–78 to 1881–82 can not be exact, owing to the tax then collected on the exportation of coined silver.

In spite of this circumstance the total amount of the coinage in the twenty-five years to which the foregoing table refers is $602,283,-543; the exportation totals $468,344,443, and the difference between exportation and coinage is $137,389,056. The average may therefore be given at $5,495,562, or $5,000,000 in round numbers.

If, as has been calculated by the third subcommittee, the stock of coin in the country is $130,000,000, the total increase that coinage is capable of producing is 3¾ per cent.

From the foregoing data it is easy to conclude that if an attempt is made to bring about a rise in the value of silver coins in circulation through the law of scarcity, a great number of years will have to elapse before the lack of currency, demanded by the country's development, can cause an appreciation in the value of the coins circulating in the Republic.

But in addition, in Mexico to a greater extent, perhaps, than in any other country, the effects of the scarcity of the monetary unit

would be more than compensated by an increased coefficient of rapidity of circulation.

It is a fact that no one can question that Mexico in the last decade has achieved enormous progress; her production and her commercial transactions of every kind have been increased tenfold.

If every country that is progressing needs a larger volume of currency, Mexico ought to have absorbed an enormous quantity thereof in the last decade: and yet since 1895–96 the excess of coinage above exports has in most of the years been considerably below the average of $5,000,000, which is the quantity absorbed annually by currency requirements.

The instrumentalities of credit of every kind contribute powerfully to stimulate the rapidity of the monetary circulation, and as we are still in the infancy of credit there can be no doubt that the recent employment of those instrumentalities is what has contributed to satisfy currency requirements without corresponding additions to the stock of coin.

For many years to come in Mexico the coefficient of rapidity of circulation is destined to increase without the necessity of any special stimulus, and if this is true in any case it follows that if the currency were to be contracted through the suspension of the free coinage of silver, the use of credit facilities, which dispense with coin, would play a still larger rôle in meeting the requirements of the nation in this respect, however great the annual increase of those requirements might be.

Thus if the monetary reform in Mexico is to be restricted to the suspension of the free coinage of silver, the parity of international exchange will only be attained after the lapse of many years, and its attainment will perhaps produce greater evils than those which it is sought to remedy.

The danger would lie in the lack of gold coins in circulation and in the possibility that an adverse trade balance might oblige the country to settle that balance with silver dollars taken from the interior circulation.

No one questions that since the years 1891–92 Mexico has been enabled to meet the balance of her international trade, thanks to the heavy volume of capital that has come from abroad to be invested in undertakings of every kind. Now, if that influx of capital should be checked, owing to the slender confidence inspired by the success of the monetary reform, the country's absolute lack of gold coins would oblige it to export the circulating silver coins, which would cause the collapse of the monetary reform and the loss of all the advantages sought thereby, including the disassociation between the value of silver as a coin and the value of silver as a commodity.

The phenomenon is not only possible but probable. When a country like Mexico undertakes a reform of such momentousness as the stabilization of foreign exchange, many persons cavil as to the success of the reform, and if this alone is sufficient to alienate the confidence which the country may inspire, it will not be surprising if capitalists, instead of hastening to invest their money in Mexico, will postpone any operation of that nature until a more propitious occasion and prospects become more encouraging.

If the parity of exchange is not attained in a relatively short period of time, if the obstacles of the medium prove sufficient to counteract

the effects of currency contraction, and if the value of the Mexican dollar is not completely disassociated from the value of silver on the London market, it is unquestioned that, if in order to settle our indebtedness abroad it becomes necessary to have recourse to silver in circulation, our coin will again be converted into a commodity and all the advantages incidental to the monetary reform will entirely disappear.

Stability of exchange, the prime object of the reform, can only be assured by having gold in circulation or in the banks as had Holland, and seeing that there is no gold either in circulation or in the banks it is absolutely indispensable to create a reserve fund in gold that it may perform exactly the same duties as the gold stock of the Bank of the Netherlands.

A very superficial study of the laws governing foreign exchange is sufficient to demonstrate the dangers incidental to the exclusive circulation of silver coins and the remedies which the gold-reserve fund could afford.

The supply and demand of drafts in a country vary incessantly owing to an infinitude of causes and with them varies the rate of exchange.

When a country possesses a stable monetary régime, the rate of exchange with countries which have the same coin in circulation is subject to fluctuations, but those fluctuations can not in general wander far from the parity of the coins, plus the cost of transportation from one country to the other and the coinage dues.

If the rate of exchange falls to a point at which the metal can be imported, the importation tends precisely, directly or indirectly, to cause a new rise in the rate of exchange.

The direct action in this respect is due to the fact that until the competition of the precious metals imported ceases the supply of drafts will be less or the demand greater than would have been the case if the importation in question had not occurred, and the indirect tendency flows from the fact that the country's stock of the precious metals increases and an increase in the quantity of coins in circulation tends to raise the course of exchange, or at any rate to check its descent.

But if the course of exchange rises to a point at which the precious metals can be exported, the same factors come into operation, but in an opposite direction.

Thus the rate of exchange, under a firm and stable monetary régime, constantly fluctuates between two extremes, though the latter do not depart far from the parity of the metal's price.

Nevertheless, there are moments of heavy decline or rise in the rates of exchange, depending necessarily in part on the variable amount of the precious metals which countries need for their international commerce and on the variable amount of drafts that are offered for sale. A heavy rise or fall of this nature is specially liable to occur between countries whose currencies are not based on the same metal.

When this heavy rise or fall occurs, the margin between the price of exchange and the price of the metal exceeds the limit that prevails under normal conditions—that is to say, it exceeds the expenses of transportation and the cost of coinage.

Now at such moments, independently of the final balance of trade between the countries that carry on commercial exchanges, heavy importations or heavy exportations of the precious metals may occur.

Now if Mexico carries out her monetary reform without having a stock of gold in circulation, she will not be able to meet a sudden demand for the precious metals without having recourse to silver, or, in other words, without selling her silver coin as a commodity, and thus forfeiting all the benefits of the monetary reform.

The creation of a gold reserve fund would constitute an admirable provisions for the oscillations of exchange and would enable the country to export gold instead of silver, thus maintaining the elasticity of the currency and the parity of foreign exchange.

If, as I have already shown, a prerequisite for securing stability of international exchange consists in holding a greater or less stock of gold to provide against the contingency of an adverse trade balance, and if the effects of such a balance are liable to be felt at given seasons of the year, owing to the shocks affecting exchange on account of the abundance or scarcity of drafts in the market—shocks that will be much more severe with an artificially enhanced currency—it is unquestioned that the reserve fund in gold is absolutely essentiai, for it will perform the same functions as gold in circulation does in the countries where a stock thereof is held either by the banks or private persons.

Other reasons also militate in favor of the creation of the gold-reserve fund.

It is a fact that, independently of the dangers incidental to the contingency of an adverse trade balance, the effects of the mere suspension of silver coinage require a great many years to make themselves felt, the period depending upon the greater or less currency requirements of the nation.

Now, with a reserve fund in gold the effects of the reform are almost immediate, the parity of exchange is attained almost automatically, and this, besides abridging the period of transition, which is fraught with dangers of every kind, offers the advantage of inspiring full and immediate confidence in the success of the reform.

If the conditions of our trade balance are such that it can only be settled through the introduction of foreign capital and if that introduction depends on the stability of our currency, every measure that tends to inspire full and absolute confidence in the success of the monetary reform, and thus to encourage the investment of foreign capital, is earnestly to be recommended.

Those who have combatted the creation of the reserve fund see in the fact that stability of exchange may thereby be secured automatically an argument in support of their point of view, for they fear that the rapid transition from present monetary conditions to the parity that will be established by virtue of the ratio to be adopted between gold and silver, will occasion a crisis that will disturb not only commerce but the national activities in general.

Without disputing the truth that may be contained in such assertions, it must be borne in mind that the argument loses all its force when applied to a silver monometallist country which for so many years has been exposed to the sudden and enormous fluctuations in the price of silver on the London market. Seeing that, by reason of the rise or fall of silver bullion, Mexico's exchange rates have suffered oscillations of more than 30 per cent, upward or downward, within a brief space of time, can the repetition of the phenomenon, destined

probably to occur for the last time, be used as an argument against the creation of the reserve fund?

The advantages inherent to the curtailment of the period of transition are so substantial that, in order to attain them, it would be well worth while to run all the risks, real or imaginary, that could possibly be involved in the fall of exchange simultaneously with the realization of monetary reform to the parity adopted between gold and silver.

The gold-reserve fund is without doubt the keystone of the stability of foreign exchange in Mexico, and the success which will be attained through that fund will be due to the functions with which it is to be invested and which are to be identical with the functions performed by a stock of gold in countries wherein that metal circulates.

Gold may either be supplied freely for exportation, as in Holland, or at a premium of so much per cent, as in France, always provided that it may be procured at the legal parity in exchange for the circulating silver coins as soon as its exportation becomes necessary. The fund will thus be the regulator of the internal circulation, destined to impart to it the necessary elasticity and to be the agency for the settlement of our foreign trade.

If the monetary reform is to be based to an equal extent on the suspension of the free coinage of silver and on the creation of a reserve fund in gold, the opening of the mints to the free coinage of gold follows as a necessary consequence of those measures.

When a country suspends the coinage of a metal it must adopt one of the following measures: It must either coin no new money or it must coin money of the depreciated metal, receiving gold as a deposit, as in India, or it must coin gold money as all other nations in the world have done.

In the first case the evils occasioned by currency contraction are greater than any possible benefits therefrom.

No country that is progressing and whose domestic and foreign trade is constantly increasing can exist under such a régime. Scarcity value has no assignable limit; and a constantly increasing currency contraction, coupled with the inability of available currency to meet the requirements of trade, would depress all prices and occasion an unparalleled crisis.

It is therefore necessary to strike new coins and to take gold as the basis, for undoubtedly there can be no better proof that currency requirements demand additions to the stock of coin than that gold should be offered for conversion into coin, in spite of its excess of value as bullion over legal parity.

Nevertheless some persons prefer that silver should be coined, the gold being received in deposit, so as to form a special reserve fund, while others would throw open the mints to the free coinage of gold.

The two measures in reality produce the same result; but I will review the arguments adduced against the free coinage of gold in order to demonstrate that it is preferable to the coinage of new silver coins guaranteed by gold in deposit.

When the coinage of a metal is automatic and free the coins that may be struck from that metal will only enter circulation when the requirements thereof necessitate them.

It is this and this alone that renders possible the concurrent use in

circulation of two kinds of coin, the value of one of which has been enhanced by scarcity while the value of the other is fixed by the market for the precious metals.

If both coins, the old and the new, are to enter jointly into circulation, it matters not whether the new coin is struck from a metal other than the demonetized metal or from that demonetized metal, provided it can be exchanged at the legal parity for the metal constituting the deposit.

As the new coin to be put into circulation will be exportable and the exportation will take place when it becomes necessary to settle abroad the balance of international trade, it will be the same whether the coins sent abroad are withdrawn directly from circulation for that end or whether the coins in circulation are first exchanged for the metal held in deposit and that metal is actually exported.

From the point of view of the mechanism of exchange it is therefore absolutely the same whether gold is coined or silver is coined and gold deposited to be used for exportation when the necessities of exchange require the reduction of the volume of coins in circulation.

Yet, from the point of view of the internal market, exclusively, it is not the same.

The opponents of the free coinage of gold argue that if gold coins enter into circulation they run the risk of being withdrawn therefrom for hoarding purposes and that, on the other hand, any metal held as a deposit can defend itself more efficaciously against the exigencies of exportation.

These reasons afford no solid argument against the free coinage of gold, both because the person who is determined to hoard it can just as easily exchange the circulating coins for the coins held in deposit as he can directly withdraw coins from circulation, and because, if the object is to protect gold from exportation, the protection is more efficacious when the gold is held by private persons than when it is held in deposit.

It is plain that if a new coin, by reason of the metal of which it is made, is liable to be hoarded, it can with equal ease be withdrawn from circulation as from a fund whose object is no other than to supply gold in exchange for silver coins.

On the other hand, coins constituting a deposit, if their object is to guarantee other coins put into circulation, will be more easily liable to exportation, for when the necessity of exporting them arises, there will be a general rush to the fund to secure them for shipment abroad.

The deposit will stand in respect to the circulation in the same relation as the stock of cash of a bank does to the notes issued by that bank; and just as those notes, seeing that they are not exportable, are, when the necessity arises for making payments abroad, converted into specie and that specie is exported, in like manner the circulating coins, made of the demonetized metal, will be presented for conversion into gold, which, as the only exportable metal, will be sent abroad for the settlement of the trade balance.

But if these reasons suffice to show that the free coinage of gold is to be preferred, on the other hand, the coinage of silver guaranteed by gold is liable to the serious drawback that the capital represented by the deposit becomes an accumulation which is idle and unproductive to the nation.

One can understand why a bank of issue should put into circulation notes payable on sight to bearer or certificates of deposit in silver and gold, for they are either issued on a larger scale than the stock of cash, in which case they afford substantial profits, or they are issued on an even scale, so that the engraved note or certificate at least implies a saving. But there is no object in the issuance of coins made of one metal and the holding in deposit, as a guaranty therefor, of a like sum in coins made of another metal. The capital which that deposit represents is a capital withdrawn from the country's general wealth and which fails to perform the proper functions of capital.

Unless, therefore, it is desired to burden the country with an idle accumulation equal to the increase of the currency, it is indispensable to throw open the mints to the free coinage of gold.

The free coinage of gold offers, moreover, the advantage that in a gradual and progressive manner it will attract gold into circulation, thereby strengthening the currency and assuring the evolution from silver monometallism to gold monometallism. It is true that gold will only enter into circulation when currency requirements irresistibly attract it, but its presentation for coinage will afford the assurance that it will be retained in the country as long as the circulation continues in a normal state.

I have completed the exposition of the reasons for the opinions which I have maintained at the sessions of the fifth subcommittee. I regret that I have not had time to outline the functions which from my point of view the gold-reserve fund ought to perform. But I was unable to find time, and my only object in drawing up the foregoing memoir was to demonstrate the imperative necessity for the adoption of the three measures that must constitute the foundation of monetary reform.

JOAQUIN D. CASASUS.

MEXICO, *November 16, 1903.*

ANNEX NO. 8.—OPINION OF THE COMMISSIONERS LIC. JOAQUIN D. CASASUS, ENRIQUE C. CREEL, MANUEL FERNANDEZ LEAL, JOSÉ DE LANDERO Y COS AND GENARO RAIGOSA.

The undersigned regret that they have been unable to reach an agreement with the majority of the members of the fifth subcommittee in regard to the necessity of the immediate formation of a reserve fund in gold and in regard to the method of organizing that fund. They would have been satisfied with a special mention in the report of the fifth subcommittee of the different opinions which each one of its members has expressed; but having been invited to present the ground of their views and to expound in a concrete manner the principles which they consider ought to serve as the basis for the monetary reform, they could not withhold compliance with that invitation, were it only as a token of the profound respect which they entertain and have always entertained for the opposite opinions held and maintained by the majority of the fifth subcommittee.

The undersigned have held that the formation of a reserve fund in gold is the indispensable basis of the monetary reform and that the fund in question ought to be established immediately. They have defended their view with scientific reasons and with reasons of public expediency.

The scientific reasons are as follows:

I. If the parity established by law between gold and silver is to be brought about by the mere suspension of the free coinage of the white metal, it can only be attained by the rarefaction of the monetary circulation; and that rarefaction, besides being difficult of realization, engenders evils greater than those which it is intended to remedy.

II. Though the parity established by law between gold and silver can in the long run be attained by the rarefaction of the monetary circulation, it affords no guaranty of stability in case an unfavorable commercial balance necessitates the exportation of metallic specie.

III. A stock of gold, whether in circulation or held in deposit, owing to the fact that it consists of exportable coins, is the only guaranty for the stability and safe operation of a monetary régime based on the artificial elevation of the value of a coin due to the suspension of free coinage.

The reasons of public expediency are as follows:

I. The success of any monetary reform depends on the confidence with which the public receives the new coins and the certitude which it entertains as to the stability of their value.

II. The adoption of successive measures, intended to be applied in turn, in case each proves insufficient for the attainment of the desired object, destroys in advance the confidence that is indispensable to the success of the reform.

III. If faith is entertained in the efficacy of the various measures that aim at assuring the success of the monetary reform, the most elementary prudence counsels their simultaneous adoption in order to increase the probabilities of that success.

As the object of any monetary reform based on the suspension of the free coinage of silver is to disassociate the value of the coins made of that metal from the price which it commands in the world's markets, it is unquestioned that the fundamental object is to advance the gold value of silver money.

The suspension of the free coinage of silver money is in principle destined to realize that object, for as all nations, in proportion as the volume of their commercial transactions expand, stand in need of greater quantities of cash, it is plain that if the additional supply is not forthcoming the value of the coins in circulation will be enhanced.

Such a result, however, can not be attained save through the lapse of time, and the period will be more or less long, depending on the greater or less intensity with which the country experiences the need of an increased volume of monetary circulation and on the degree in which a higher coefficient of rapidity in circulation may neutralize the effects of the rarefaction of the currency.

Nations which are on the full tide of progress and development need daily an increasing quantity of cash for their transactions; but the volume of the cash additions will depend on the total volume of their commerce and on the importance of the rôle, for the purposes of circulation, played by the instrumentalities of credit, which render more and more unnecessary the employment of coin.

In countries like Mexico, in spite of the enormous progress which it has achieved and is achieving day by day, the necessity of increased quantities of coin in circulation is but little felt, and owing to the fact that the country is only just beginning to make an intelligent

use of the instrumentalities of credit the increased demand is likely to be offset for a considerable time to come by a higher coefficient of rapidity in the movements of the monetary circulation.

The suspension of the free coinage of silver would encounter difficulties in producing its natural effects in Mexico, and even if it produced them it would only be after the lapse of a great many years.

Granting, however, that the rarefaction or contraction of the circulation could be brought about in a relatively brief period of time, what would have to be the importance of that contraction to enable it alone to maintain the price of silver coins at a margin of from 30 to 50 per cent above their bullion value? What would be the effects of that contraction?

It would be difficult to lay down a law which should establish a connection between the increase in value of a circulating medium and the quantity of that medium; but it may be said, with a fair probability of accuracy, that if the increased value of the medium is due to the curtailment of the quantity the decrease in the stock of coin will be proportionate to the enhancement in its value.

In order, therefore, to make silver coins worth from 30 to 50 per cent above their bullion value, it would be approximately necessary in order to attain that enhancement to curtail the circulation in proportion to the total volume of business by from 30 to 50 per cent.

Now the disastrous effect of so considerable a contraction of the monetary circulation are well known to everyone.

As prices do not depend only on the quantity of commodities offered, but on the quantity of coin that can be given in exchange for those commodities, on the hypothesis that production continues unchanged and that the quantity of coin is reduced by one-half. prices would undergo a like reduction and in their decline would occasion the ruin of producers. The transactions which render indispensable the circulation of wealth would also be paralyzed, for, inasmuch as the rate of interest on money is intimately bound up with and dependent upon the quantity of coin in circulation, it follows that that rate rises in proportion as the circulation of coin decreases. A high rate of interest on capital is an invincible obstacle to the natural development of wealth, for while it permits the investment of capital in businesses that are exceptionally remunerative, it destroys capital already invested in productive enterprises and arrests the progressive march of nations.

If the parity between gold and silver, created by law, has to be attained at such a price, it would be better to go without it, for the benefits which the fixity of exchange might bring along with it would be more than offset by the evils that would flow from the decline of prices, which would be proportional to the curtailment of the circulating medium, and from the stiffening of the rate of interest which would be commensurate with the effects of the contraction of the monetary circulation.

The disastrous effects of the curtailment of the quantity of coin in circulation might be borne by a prosperous country and there are persons who believe that they would be compensated by the benefits which the stabilization of exchange would bring in its train.

Granting the truth of this assertion, it is nevertheless demonstrable that the benefits of fixity of exchange can not be stable and lasting if, as a consequence of the monetary reform itself, the foreign capital

that comes to the country in quest of investment is diverted to other lands or ceases to be sufficient to make good the adverse balance of our foreign trade.

It is a fact that no one will dispute that in recent years Mexico has had to rely on the foreign capital coming to the country for investment to compensate the adverse balance of her trade.

It follows that if, as a consequence of the monetary reform and until such time as success shall crown the efforts of our Government, foreign capital refrains from entering Mexico for investment, it will be necessary to settle the trade balance by means of the circulating medium.

Now, will it be possible to maintain the disassociation between the value of the silver coins and the price of silver bullion on the London market in case said coins have to be exported to foreign countries?

It is undoubted that nations can not continue indefinitely to produce less than they consume, and that the necessity of exporting the circulating medium is the only brake capable of checking the tendency of nations to buy more than they can sell. But until that propensity is corrected, until that evil is restricted, until international commerce is reduced to its just and proper proportions, it is necessary to pay foreign nations for the articles bought from them, and there is no other way to pay them than to part with the circulating medium.

The country which seeks to effect its monetary reform merely by suspending the free coinage of silver will not succeed in the attempt and the failure will be hopeless if, during the period in which the value of the silver coins is being artificially enhanced, it should prove necessary, in order to settle an adverse trade balance, to export the circulating medium.

A stock of gold, either in circulation, in the coffers of the banks, or in the form of reserved funds specially constituted, is the only guarantee for the easy operation of a monetary system based on the suspension of the free coinage of silver.

In point of fact, in the event of an adverse trade balance, when necessity obliges a nation to export a portion of its circulating medium, a stock or reserve of gold obviates the exportation of the coin whose value has been artificially raised, by furnishing in its stead a metal of full value and unrestricted international acceptance.

In the natural and normal operation of economic phenomena, it may be said that any country, when it has realized all its transactions at home and abroad, has thereby paid all its debts and has added to its wealth by increasing proportionately its monetary circulation.

As the development of wealth does not always conform to the laws that should control it, it often happens that some countries accumulate wealth more rapidly than others, always securing a favorable trade balance, while other nations can not produce enough to pay for what they consume, and settle their trade balances either through increased investments of foreign capital or by sending their coin abroad, thus curtailing the circulating medium.

This phenomenon can not go on indefinitely. The requirements of the circulation are so pressing that they lead to the restoration of the balance of international trade.

Under a perfect monetary régime these effects are of relatively short duration, for the precious metals, like liquids, always seek their own

level and flow to points where they find the most remunerative employment. But when monetary systems are based on more or less ingenious artificial devices that law does not apply, and the duration of the effects in question is liable to be unduly prolonged.

A stock of gold, or a reserve fund in gold, not only enables a nation to settle its trade balance in an exportable coin, but, inasmuch as it obviates the impairment of the basis of the monetary system, places a nation on the same footing as if it were under a perfect monetary régime.

Inasmuch as gold, when constituting a reserve fund, can only be exported by the withdrawal of an equivalent quantity of silver coin from circulation, its exportation produces the natural effects of a contraction of the monetary circulation, and therefore tends to prevent the recurrence of adverse balances in international trade; and, as concurrently with the exportation the monetary system continues to operate freely, without impairment of the artificial device whereby the higher value ascribed to the silver coins in circulation is maintained, the requirements of that circulation will cause gold to return to the country, restoring the disturbed equilibrium of prices, and producing the necessary elasticity which every currency, in order to be thoroughly efficacious, ought always to possess.

Under this régime there can be but one danger, viz., that the adverse trade balance might exceed the amount of the reserve fund in gold. The danger would in any case exist. But it would be remote if the reserve fund were to attain 30 per cent of the monetary circulation, for a trade balance could not exceed that proportion without causing not merely the collapse of a monetary system, but the country's ruin.

In point of fact it is hard to conceive how a nation could be under the necessity of exporting 30 per cent of the total amount of its coin in circulation in order to settle the balance of its international indebtedness, and if such a contingency, which is possible though not probable, were to arise, it would reveal a situation so critical that it could only with extreme difficulty be modified or remedied.

A gold reserve would, therefore, practically constitute not only a guaranty fund, which would assure the fixity of international exchange and the stable operation of the monetary system, but would also provide for the payment, in exportable coin, of the maximum margin which an international trade balance is capable of occasioning.

To sum up, it may be said that it is absolutely indispensable for the success of a monetary reform based on the suspension of the free coinage of silver that a reserve fund in gold be created, for though the parity established between gold and silver may be attained by the contraction of the monetary circulation, that contraction would be rather hurtful than beneficial; and because, even though at a great sacrifice, the parity were brought about, the new régime would afford no guaranty of stability in case an adverse trade balance were to necessitate the exportation of the circulating silver coins.

Independently of the scientific reasons that have just been set forth, it is indispensable to take into consideration other reasons based on public expediency.

The success of any monetary reform must necessarily be based on the confidence which the public may accord to the new currency and the certitude which it may entertain as to the stability of its value.

It is impossible to understand how these conditions could be met by the measures which the majority of the fifth subcommittee have sought to recommend to the Government, seeing that the possibility that the parity, established by law between gold and silver, will not be secured, is clearly hinted at and the subsidiary steps that will have to be taken in such an event are outlined. If the majority of the fifth subcommittee declare that in case the legal parity between gold and silver proves slow of realization, the surest method to bring about that parity will be to add a sufficient sum to the gold reserve to influence the home market in the direction of imparting the desired stability to the rate of exchange, undoubtedly that majority apprehend, and with reason, that the mere suspension of the free coinage of silver will not suffice for the desired object.

Now, is this declaration not calculated to destroy in advance the confidence with which the public ought to be inspired as to the probable success of the monetary reform?

Public confidence, though often acting under the influence of the unreflecting impulses of the multitude, demands, in this case, actual facts that will at least guarantee the probability of success.

Now, that confidence can not be felt by the nation if the persons invited to advise the Government as to the best policy to be pursued in this matter not only express the fear that the attainment of stability and fixity of international exchange may be unduly delayed, but declare that in the event of such a contingency there are other measures in store of undoubted efficacy which will have the result of assuring the success of the monetary reform.

Precisely for these reasons the undersigned believe that if absolute and complete faith is placed in the efficacy of the projected measures to bring about, if applied successively, the legal parity between gold and silver, then those measures ought to be adopted simultaneously, in order that the period of transition may be as short as possible and that the results may at once be satisfactory and definite.

The difference of opinion between the majority and the minority of the fifth subcommittee is insignificant. The majority hold that a reserve fund in gold is not an indispensable factor in bringing about the parity which the law may establish between gold and silver. They are indeed convinced that it affords the best and most appropriate way to assure the success of the monetary reform. But they desire experimentally to see whether it is possible to attain the same results by the mere suspension of the free coinage of silver and they recommend that recourse be had to the gold reserve in the event of the non-realization of the cherished hopes of success.

These tactics, which in any other case and in regard to measures of any other nature would be expedient and even commendable, do not deserve to be taken into consideration when monetary reform is the stake; because the fundamental object to be kept in view is to convince the public that the new coin, destined to replace the old one, will in a very brief period possess the gold value which the law ascribes to it, and that that value will constitute the sole and indestructible basis of the stability of international exchange.

Thus the majority of the fifth subcommittee do not question the efficacy of the gold reserve. They merely differ as to the opportune moment for its creation; and as in this respect all the reasons that go to prove the necessity of its immediate formation have been adduced,

it may be held to have been proved beyond the possibility of doubt that the reserve fund is as indispensable a feature of monetary reform as the suspension of the free coinage of silver itself.

The necessity of the immediate creation of the gold reserve fund being thus established, it is necessary to describe, even though summarily, the functions which the fund in question is to perform.

The members of the minority of the fifth subcommittee held in this respect opinions which, though essentially similar, differed as to certain relatively important details. Some of the minority members thought that, to avoid interference with operations of exchange, which are and ought to be a specialty of the banks, the functions of the fund should be confined to supplying gold for export, when, after offsetting the nation's credit and debit, it should prove necessary to make gold payments abroad.

This system was calculated to simplify greatly the functions of the reserve fund and to render its administration most easy; but inasmuch as, from a strictly scientific point of view, to supply gold for exportation is exactly the same as to issue a draft payable abroad in gold receiving silver money in exchange, all the members were constrained to admit that the preferential object of the administration of the reserve fund might be the sale of letters of exchange against the fund itself, payable abroad if part of the fund is to be deposited abroad, and another part, though a much smaller one, at home.

On the other hand, the sale of exchange may be restricted to absolute cases of necessity, and for this purpose it would be sufficient to authorize the collection of a commission of 2 per cent above the market price.

The undersigned therefore think that the reserve fund might, during the period of transition, sell foreign exchange at rates that would aid the gradual rise in the gold value of the silver currency, until attaining the legal parity plus 2 per cent, or an exchange rate of —— on New York and equivalent rates on other foreign markets, and, after the lapse of the transitional period, maintain the stability of international exchange, with a margin of 2 per cent, by selling drafts on foreign countries whenever it should prove necessary to restore the legal parity.

The functions of the reserve fund thus defined would be directed to facilitating the attainment of the legal parity between gold and silver and to maintaining that parity after the transitional period, whenever the transactions in international exchange might cause a divergence between the value of the circulating medium and the gold value ascribed to it by law.

Considering the functions which the minority of the fifth subcommittee have in view for the reserve fund, it was to be expected that they would not share the opinions held by the majority of said subcommittee as to the minimum amount with which it is to be started and the resources that are to be devoted to its formation.

If the prime object of the reserve fund is to be able to settle trade balances in gold, in order to assure the perfect operation of the monetary system, it is indispensable that the fund in question should amount to 30 per cent of the value of the new coins to be issued or their equivalent in gold.

In point of fact, seeing that the fear of the occurrence of an adverse trade balance may be realized at any time after the promulgation of

the monetary reform, it is necessary that the Government should be ready to ward off the harm which the phenomenon in question might occasion, and that to that end the fund should be of sufficient magnitude to enable the balance of our international trade to be settled in gold by means of drafts on foreign countries.

It is undoubted that there are no reasons which directly justify the choice of 30 per cent rather than of 25 per cent of the total coin in circulation as the amount of the reserve fund; but, as has been already said, the undersigned sought to fix a margin, an excessive margin, beyond which the curtailment of the circulating medium could not go without occasioning, at least in all probability, a crisis so profound as to compromise the economic future of the nation.

In view of the proportions which we think the reserve fund ought to have, it will be necessary, with a view to its formation, to have recourse to extraordinary resources and to other resources that may be characterized as normal and indefinitely collectible.

The reserve fund will therefore be formed:

I. From extraordinary resources, whether they be the nation's treasury reserves or the proceeds of a loan of a provisional nature.

II. From the profits that may be secured from the mintage of the new silver coin.

III. From the interest on funds deposited in banks either in the country or abroad.

IV. From 3 per cent of the import duties which will have to be paid in gold at the parity to be determined by law, said 3 per cent being utilized for the redemption of the debt contracted in case it be necessary to have recourse to a loan for the formation of the reserve fund.

The only point in regard to the reserve fund as to which the majority and the minority of the fifth subcommittee do not differ is that which concerns its administration, for all are agreed that it should be kept separate from all the properties that constitute the federal assets and that it should be administered by a commission which, though presided over by the minister of finance and public credit, will be composed of private individuals to be selected by the Government from among persons of prominence in the commercial and banking world.

With a view to presenting in a concrete form all the opinions held by the undersigned in regard to the reserve fund, its functions, formation, administration, etc., the following propositions have been drawn up:

I. The creation of a reserve fund is considered by the minority of the fifth subcommittee as necessary and indispensable for the realization of the monetary reform with probabilities of success.

II. The reserve fund will perform the following functions:

(*a*) It will, during the period of transition, aid the gradual rise of the gold value of the silver coins through the sale of drafts on foreign parts at rates that shall be conducive to that end, until the attainment of the parity plus 2 per cent, or an exchange rate of —— on New York and equivalent exchange rates on other foreign countries.

(*b*) When the period of transition shall have passed, it will aid the maintenance of stable international exchange rates at a margin of 2 per cent. As long as drafts are being sold in the City of Mexico on New York at rates that are under 2 per cent, foreign exchange will not be sold out of the reserve fund; but when that rate has been

passed, such quantity of foreign exchange will be sold as shall, in the opinion of the managing committee of the fund, suffice to reestablish the legal parity.

III. The amount of the reserve fund is fixed at 30 per cent of the value of the new coins to be issued or their equivalent in gold.

IV. The reserve fund is to be created partly in the country and partly abroad.

V. The reserve fund will be formed:

(*a*) From extraordinary resources, whether they be the nation's treasury reserves or the proceeds of a loan of a provisional nature.

(*b*) From the profits that may be secured from the mintage of the new silver coin.

(*c*) From the interest on funds deposited in banks either in the country or abroad.

(*d*) From 3 per cent of the import duties, which will have to be paid in gold, at the parity to be determined by law, said 3 per cent being utilized for the redemption of the debt contracted, in case it be necessary to have recourse to a loan for the formation of the reserve fund.

VI. The reserve fund will be completely disassociated from all other funds of the national treasury; it will be devoted solely and exclusively to its object, and in no case may the Government make use of it for other liabilities of the national treasury, whether ordinary or extraordinary.

VII. The reserve fund will be administered by a commission appointed by the Government and presided over by the minister of finance and public credit.

VIII. The amount necessary for the formation of the reserve fund will be gradually accumulated during the period of transition and will be completed when that period shall have terminated and the normal functions of the reserve fund in the maintenance of legal parity shall commence.

IX. In no case shall the period of transition exceed three years, and during that period the reserve fund will be operated so as to impart in a stable manner to the silver coins a fixed value in gold according to the ratio adopted.

Before concluding, the undersigned would draw attention to an important point as to which they differ from the majority of the fifth subcommittee, viz., as to the free coinage of gold.

In view of the principles maintained by the majority of the fifth subcommittee, according to which the legal parity between gold and silver is not to be attained immediately, even though it should prove possible so to attain it, it can be readily understood that they do not consider the opening of the mints to the free coinage of gold as conducive to the country's interests.

In point of fact, if the parity between gold and silver, according to the ratio to be established by law, is to be attained by a contraction of the monetary circulation, it is undoubted that the new gold coin which would meet the pressing needs of that circulation would hamper or defer the effects sought to be brought about by such contraction of the circulating medium.

It can be readily understood that the undersigned hold a diametrically opposite opinion, seeing that according to their point of view every effort should be made to bring about parity between the new sil-

ver and gold coins at the earliest possible moment; and, further, seeing that they do not build their hopes of the success of the monetary reform on the contraction of the circulation, but on the efficacy of the functions of the reserve fund, it is natural that they should champion the expediency of throwing open the mints to the coinage of gold.

It is probable that gold would not at once be offered for conversion into national coin, even though its coinage were free; but not on that account ought its coinage to be prohibited when trade, the supreme arbiter, causes its presentation at the mints of the Republic.

The undersigned have observed a lacuna in the report of the majority of the fifth subcommittee in regard to the measures which should be adopted during the period of transition.

It is certain that the mints of the Republic will not be able soon to turn out the entire quantity of new coins necessary to be given in exchange for the coins at present circulating; and in order to provide for this situation and to assure the earliest possible disappearance of the present circulating medium, thus preventing the concurrent use of two different kinds of coin by the public, it would seem advisable to authorize the mints to issue certificates of deposit to bearer for amounts of $500 and $1,000, which will be exchanged for the new coins as fast as they are turned out within a specified period of time. These certificates could form part, just as if they were coin, of the metallic reserves, which, according to the law governing institutions of credit, the banks must hold as a guaranty for their note circulation. This measure would abridge more effectively than any other the period of transition, and would enable the Government to retire within a very short period of time a large portion of the present dollars that are in circulation.

ENRIQUE C. CREEL.
M. FERNANDEZ LEAL.
G. RAIGOSA.
JOAQUIN D. CASASUS.

MEXICO, *December 5, 1903.*

My opinions are opposed to the monetary change, but if said change is to be made I am in accord with the general features of the foregoing project.

J. DE LANDERO Y COS.

ANNEX NO. 9.—OPINION OF COMMISSIONERS CARLOS DIAZ DUFOO, RICARDO GARCIA GRANADOS, JAIME GURZA, EVERARDO HEGEWISCH, LUIS G. LABASTIDA, PABLO MACEDO, AND CARLOS SELLERIER.

The undersigned regret that they have been unable to secure the indorsement of all of their esteemed colleagues of the fifth subcommittee for the plan of monetary reform which, after careful study, they have felt themselves in duty bound to submit to the enlightened consideration of the Government of the Republic as a remedy for the currency difficulties which beset the country and which in so grave and serious a manner jeopardize its future.

The differences that have arisen in the fifth subcommittee, in whose labors Mr. Enrique C. Creel, the vice-president, and Mr. Jaime Gurza, the assistant secretary, have taken a constant and active part, fortu-

nately do not refer either to the measures which constitute the fundamental basis of the plan which we took leave to recommend to the consideration of our distinguished colleagues or to many of its details even of a secondary nature. Those differences are confined to three concrete questions: First, the expediency of creating immediately a reserve fund in gold to guarantee the conversion into that metal of the silver money whose coinage is proposed; second, the opportune moment for commencing the coinage of the new gold currency, and, third, a mere detail as to the form and circulation of certain special certificates of the mints, in regard to the creation of which we are all agreed. In regard to these three points, whose importance, in spite of the considerable time absorbed by their discussion, ought not to be unduly exaggerated, we, the undersigned, hold views that differ from those held by Messrs. Jaoquin D. Casasus, Enrique C. Creel, Manuel Fernandez Leal, José de Landero y Cos, and Genaro Raigosa.

Such being the case, the present report ought, strictly speaking, to be confined to the points which have given rise to the diversity of opinion; but they are so intimately bound up with the rest of the plan of monetary reform which we have framed and which figures at the end of this report, that it would be very difficult for us, and perhaps impossible, clearly to expound and defend our views in regard to those special points without having reference to the body of our plan and without considering it in the aggregate. We have therefore preferred to give a full exposition of the reasons on which we have based our plan of reform, setting forth in the proper place the arguments that are adducible for those views of ours that have not been fortunate enough to command the unanimous approval of our colleagues, whom we have also entreated to set forth their views in writing at such length as they may deem fit.

In accordance with the method in question we proceed to our task without further delay.

ANTECEDENT FACTS.

1. After having investigated the matter with the fullness which it considered incumbent upon it, the fourth subcommittee, in an extensive and laborious report, dated August 13, 1903, came to the following conclusion: "It is unquestioned that it is to Mexico's interest to impart the greatest possible stability to its international exchange rates."

2. This report, which, according to custom, was distributed in printed form among the commissioners several days in advance, was submitted to the monetary commission on September 3 last, and of the twenty-five commissioners who were present at the session only one, Mr. José de Landero y Cos, expressed dissent from the conclusion above named. Subsequently three other commissioners expressed their acquiescence in the same conclusion. So that, altogether, the opportune moment seemed to have arrived for the appointment of another subcommittee, which, as indicated by the fifth point of the interrogatory of the department of finance, should study "the various measures put in practice by other nations to stabilize their rates of international exchange and in general to solve their monetary difficulties," and, in conclusion, to give the Government its opinion "as to the most efficacious and opportune measures to improve the present monetary situation of the Republic."

PROBLEMS WHICH HAVE BEEN STUDIED AND WHICH IT IS DESIRED TO SOLVE.

3. In view of the foregoing antecedents we have considered that it was our duty—

(*a*) To suggest the means which we considered most opportune and efficacious to bring about the stabilization of our international exchange rates, and

(*b*) To draw up a plan of reform as complete as possible, with a view to improving the present monetary situation of the Republic.

MEANS TO STABILIZE OUR INTERNATIONAL EXCHANGE RATES.

4. The problem of stabilizing the rate of international exchange may assuredly be solved in different ways, according to the circumstances; but if, on the other hand, it be considered that the chief civilized nations have deemed it to be their interest to adopt, and one after another have, de facto, adopted, the gold standard, turning their backs with or without reason, on the gold and silver bimetallic régime; on the other hand, that all the attempts which have been made to return to the bimetallic régime in question by means of international conventions, have failed; that the gold price of silver, due to these causes alone or to these causes coupled with others, has fallen considerably in the world's markets, also fluctuating through a very wide range; and, finally, that our financial relations of every kind are with gold monometallist nations, it has seemed to us that the only efficacious and practical method to impart fixity to our international exchange rates lay in the adoption of the same metal as the basis or measure of values in the Republic.

The reasoning that has led us to this conclusion is, in our opinion, decisive, and setting aside theoretical disquisitions which would be out of place here, may be summed up as follows: The phenomenon of international exchange is, in reality, only the result of operations of a like nature to those which take place between a country's internal markets and just as the latter, for purposes of rapidity and simplicity, require a value to act as common denominator and that value is found in coin, so the former, if they are to be conducted under equally favorable conditions, necessitate the existence of a value on which they may be based and which will be accepted by the parties to international commerce. Now, in the present economical state of the world, that value can be nothing but a single monetary metal, if, as we have said, the desire is to establish a basis of exchange that shall work easily and expeditiously; for, otherwise, what in one nation is money is in another nothing but a commodity, and the rates of international exchange vary with the prices commanded by that commodity.

THE GOLD STANDARD WITH GOLD IN CIRCULATION.

5. Having reached the above conclusion our next step was to undertake an examination in detail of the various monetary systems of the nations which have adopted the gold standard. We will not here set forth the results of that examination, save to the extent that is absolutely necessary, for in the two volumes published by the commission under the title of Data for the Study of the Monetary Question in

Mexico, full particulars, which we here omit for the sake of brevity, will be found.

6. The most important of those results was the demonstration of the fact that, among the systems in question, the best seems to be that which is based on the free coinage of gold and the actual circulation of gold coins, because it renders a country's currency elastic and self-regulating and protects it from artificial interferences which often interrupt the natural operation of the complex, varied, and manifold causes that influence the economic life of nations. On the other hand, the dictates of science, which stigmatizes as dangerous the interference of the state in the free and spontaneous operation of economic laws, whether that interference is exercised directly or indirectly through privileged institutions, corroborate the conclusion to which we have alluded, and, in accordance therewith, we firmly believe that the best monetary system that can be recommended to a country which desires to realize the conditions that are at present most conducive to economic prosperity and progress, is the gold standard, with free coinage of gold and an actual circulation of that metal.

7. Now can the Republic adopt at once a monetary system based on those conditions, or, in other words, can it at once adopt the gold standard with the free coinage of gold and gold in circulation? In our opinion it can not for many reasons, of which the two following sum to us the chief and, therefore, the decisive ones:

(*a*) Though the production of gold in the Republic has kept pace with its general progress and last year (1902–3) amounted to 21,921.-268 kilograms, worth $14,805,975.27 gold at the legal rate of $675.416 per kilogram, the whole of that production is exported and there is absolutely no gold here either in circulation or (as it seems fair also to affirm) hoarded up, for in the reserves of our numerous banks of issue the stock of gold is insignificant and there is no ground to believe that it is held in appreciable amounts by private persons. Thus in order to get gold for purposes of monetary circulation, the nation would have to buy it in the open market, which, in one form or another, would impose a heavy sacrifice on the country which neither the exchequer nor private parties could carry without serious loss.

(*b*) The Republic, on the other hand, is one of the largest silver producers in the world and is, therefore, interested in staying the decline of the white metal and maintaining the consumption thereof for monetary purposes. So great do we consider this interest to be that, in all probability, we must look to an unconscious, somewhat unreasoning, but yet efficacious realization thereof, for the foundation of the belief, generally entertained until quite recently, that Mexico could not change her monetary system until her exports other than silver shall suffice at least to pay for her imports of foreign merchandise. Be that as it may, it is evident that our interests as silver producers can not be subserved by the decline in the gold price of silver, and there can be no question that if we were to adopt outright the gold standard, demonetizing silver, we should accentuate that decline for two substantial reasons. One of those reasons, and perhaps the more important one, would be the moral effect that would be produced in the world's markets, which are already weak, we might even say nervous, through the adoption of the gold standard on the part of a nation which had been faithful to the cause of silver and which, by at last relinquishing it, would give it, so to speak, the coup de grace. The

other reason would be more effective and not less important and would consist in the fact that in adopting the gold standard we should have to withdraw from circulation within a brief period of time substantial sums of silver and should cease to require in future the appreciable quantities of that metal which we use for monetary purposes. For this twofold reason, and because undoubtedly we should have to sell the demonetized silver, there would be a larger quantity of that metal available on the market and it is well known that the inevitable effect of an increased supply of a commodity is the lowering of its price.

A SILVER CIRCULATION BASED ON GOLD.

8. Another fact that is established by a close study of the monetary systems of nations which have adopted the gold standard is that all of them have retained silver in circulation, in some cases as subsidiary coinage, in others as full and unlimited legal tender, but in either case in very substantial quantities. This fact, coupled with the circumstance that this mass of silver coin has been maintained at the same parity with gold coin, as prevailed when the two metals stood in the ratio of 1 to 15½ or 1 to 16, can not but strike the observer as extremely remarkable, when, as is well known, that ratio ceased to exist years ago and has given place to a ratio at times approximating 1 to 40 on the basis of the market prices of the precious metals.

9. On the other hand, some nations, foremost among them being British India, have succeeded in passing from silver monometallism to gold monometallism, while retaining in circulation a very considerable quantity of silver coins, which at first were as depreciated as the metal itself, but which in time attained a gold valuation considerably in excess of the value of the silver which they contained. Hence it has seemed to us fair to conclude that though the best monetary régime consists in the adoption of the gold standard with gold in circulation, it is possible under given conditions to establish a system under which silver is the actual circulating medium and is unlimited legal tender, while at the same time it stands in a fixed and stable ratio to gold and is, in consequence, based upon gold.

10. When silver is only used for subsidiary coinage and the only money that is unlimited legal tender is gold, as is the case in Germany, England, and other nations, the system is elastic in its nature and, as we have pointed out, operates automatically. On the other hand, if silver, either alone or in combination with gold, is unlimited legal tender, as is the case, for example, in France and Holland, the system does not conform altogether to the conditions, which scientifically speaking, a currency ought to possess, and therefore it constitutes, or ought to constitute, merely a transcient régime, and this because it necessitates the constant action and vigilance of the public authorities, whose intervention in such matters, according to sound principles of government, ought to be restricted to absolutely indispensable limits and ought to cease altogether as soon as circumstances render that possible.

11. Such are the principles, as set forth in the first two articles of the resolutions with which this opinion terminates, that have informed the plan of monetary reform which is expanded in the thirteen clauses or propositions contained in the third article and constituting, in our humble opinion, the general measures which the

Government of the Republic ought to adopt. We now proceed to give our reasons for them, merely premising that some of those propositions are not basic nor indispensable, but merely aim at correcting the imperfections of our existing monetary régime, in so far as it affects the subsidiary coinage, and that if we have embodied them in our plan we have done so because it seemed to us that the realization of a reform in regard to more important points afforded an opportunity that ought not to be missed to adjust the new system to scientific principles, even in points of detail, none of which lack importance though at first sight they may seem to.

BASES OF THE PLAN OF MONETARY REFORM.

A. Closing of the mints to the free coinage of silver.—12. When one examines the monetary systems in which silver plays a more or less important rôle (and we have already stated that such are the monetary systems of all civilized nations, not excluding those which have a gold standard with gold in circulation) it is easy to observe that there is one characteristic feature which is common to all of them, and it is that silver is not coined freely at the request of private individuals, but that the right of issuing it appertains exclusively to the state, which adjusts the quantity of silver coin in circulation either to settled rules or to the dictates of a wise and enlightened solicitude for the public interests. This fundamental fact has led us to examine in detail its cause and its effects; and though both have been already fully elucidated by economists, so that it would perhaps be sufficient merely to refer to their works, we have decided to recapitulate them here, without laying any claim to novelty, in order to make clear the importance which we attach to the first of the bases of our plan of monetary reform, viz., the closing of the mints to the free coinage of silver.

13. It is a fact well known to political economy that money, though its object is to act as a measure of values, is subject to the law of supply and demand like any other article or commodity that can become the basis of mercantile transactions between man and man; and this fully explains why it is that a metallic coin, of which the coinage is free, is, for purposes of international exchange—the aspect under which we are considering the question—inevitably and fatally linked to the price of the metal of which it is made, as is the case with the Mexican dollar, and will always be the case as long as we continue under our present monetary régime.

14. As a matter of fact the phenomenon of international exchange between countries whose currencies are based on different metals resembles in reality any other commercial transaction in which each party tries to get the best of the bargain, securing as much as he can and giving as little as possible in return. Now, let us consider what happens, for example, between a person who possesses Mexican dollars and who wishes to obtain gold and a person who possesses gold or foreign gold coin and who wishes to obtain Mexican dollars. If the latter is asked to pay for the Mexican dollars which he needs a higher price than the silver which they contain is worth, he can avoid paying that price either by buying dollars abroad, where large quantities of them are to be had, or by securing silver in the open market and having it coined. It is true that, theoretically, the cost of either

of those operations ought to constitute a limit to the depreciation of our dollars, preventing them from sinking to exactly the same price as the silver which they contain; but in practice, owing to causes which it would take us too long to explain, that limit disappears and is of no avail, and in any event it constitutes so small a margin as to be hardly of any use to the holder of dollars. The situation will not be the same if the coinage of dollars ceases to be free, for then it will only be possible to obtain silver dollars from the holders thereof, who will thus find themselves in possession of an article of which the supply will be limited and which will, therefore, be susceptible of appreciation in proportion to the demand. This situation, if carefully examined, is found to be in no manner essentially unjust, for, as in practice, the quantity of gold is not unlimited (seeing that of the total stock of that metal in the world we need only take into account that portion which is in the hands of persons who desire or who have to contribute the value which it represents to our markets); the only thing done in reality is to create conditions of equality between the interests that are pitted against one another. Such being the case, if gold exists only in a limited quantity there is no injustice in also limiting the quantity of the silver coins that may have to be given in exchange for gold.

15. By means of the principle of the limitation of the supply of coin, which, in our opinion, is borne out by the experience of all nations and is sanctioned by the teachings of economists, it is possible to disassociate the value of a coin from its mere bullion value and even to raise it to such parity with gold as the law may establish, provided only that the quantity of coin in circulation be proportionate to the demand therefor, or, in other words, that the quantity of coin be not excessive in relation to the requirements which it is destined to meet.

But what are those requirements in any given nation or people? We think that, theoretically, it is almost impossible to ascertain them, for they depend on causes which are extremely complex and variable, such as the number and character of the operations into which coined money enters; the coefficient of rapidity of its circulation, which in turn depends on the greater or less use that is made of the instrumentalities of credit in their manifold forms; the degree of wealth and enlightenment of the mercantile community and of the people in general; and even the inclinations and preferences of the people, which are often unknown and for which, even when known in part, it is not always easy to assign a satisfactory and rational explanation. Experience, therefore, seems to be the only safe guide in so delicate a matter, and this is especially true in the case of Mexico, seeing that we are without information as to the most elementary factors of the problem, as is clearly demonstrated by the single fact that the third subcommittee, in spite of its patient and laborious investigations, was unable to determine the quantity of coin held in the Republic.

16. We will return to this question later on. For the time being it is desirable to state that another very important consequence of the operation of the law of supply and demand, as applied to coin, is that, in the case before us, it can be affirmed that everything that tends to curtail the demand for gold or to increase the supply thereof, in the

home markets, will help the establishment and maintenance of the legal parity between gold and silver coins and hence of the stability of international exchange. In the former respect it seems evident, for example, that the expansion of our industrial production, curtailing, as it will, the importation of similar foreign articles which have to be paid for in gold; the use, as far as possible, for the service of our national gold debt, of the reserves owned by our Government abroad, inasmuch as that use will diminish, at least temporarily, the purchases of drafts on foreign cities; and other similar measures will contribute to the maintenance of the parity. Equally evident is the influence that might be exerted in the same direction by all agencies tending to stimulate our exports of merchandise as well as of securities, involving the introduction of foreign capital, which plays so important a part in equalizing our trade balances, as has been proved to the point of evidence by the interesting investigations of the first subcommittee.

17. In spite of all this, could we and ought we to recommend the adoption of measures of a general character, such as those mentioned, of which the aim should be to bring about and maintain the stability of international exchange? Prudence counsels us to refrain from doing so, for, in addition to the fact that we lack a good deal of information that would be indispensable to enable us to argue with probabilities of accuracy and that the Government's financial policy is already clearly directed to the aims in question, as is proved by the uninterrupted material progress of the Republic, it seemed to us that the scope of our labors was confined to the questions that are directly and intimately connected with the monetary problem as to which we were honored by being consulted. For these reasons we have confined ourselves to the general suggestion contained in the opening sentence of the eighth base of our plan of reform.

CREATION OF A RESERVE FUND IN GOLD.

18. But among the questions that are intimately connected with the monetary problem is that which involves the expedience of creating a special reserve fund in gold, destined to exercise a very direct influence on the home market for foreign exchange, in the direction of establishing and maintaining the legal parity between gold and silver coins, either by freely furnishing gold for exportation or selling drafts on foreign parts, whenever, owing to the scarcity of drafts on the market, there shall arise a stiffening of the rates of exchange calculated to jeopardize the maintenance of the legal parity. This was a question which had to be, and has, in effect, been the object of our closest study.

19. Unfortunately in this respect the opinions of the persons forming the fifth subcommittee and of Messrs. Enrique C. Creel and Jaime Gurza, who have taken an assiduous part in the labors of that subcommittee, have not been unanimous.

Messrs. Joaquin D. Casasus, Enrique C. Creel, Manuel Fernandez Leal, José de Landero y Cos, and Genaro Raigosa advocate the immediate creation of this special reserve fund in gold for the reasons set forth by them in separate documents. The undersigned have come to the opposite conclusion for the reasons which they will proceed to expound, after placing on record an important reservation.

20. We acknowledge that the creation of a reserve fund in gold, provided its amount be considerable, is, without doubt, the most efficacious measure that can be adopted to secure at once a given rate of exchange and even to bring about the legal parity aimed at, seeing that it brings into play both of the influences which we have mentioned as best adapted for the realization of those objects. On the one hand it increases the supplies of gold offered in the home markets and on the other it withdraws silver coin from circulation, so that its action will be twofold and, in consequence, rapid, nay, immediate.

21. But this fact, from our standpoint, constitutes one of the greatest drawbacks to the creation of the fund upon the first introduction of the monetary reform, for it is not to be forgotten that that reform, though destined greatly to benefit the general interests of the Republic, will at first occasion some inconvenience and loss to the export industries and the silver-mining industry. The silver-mining industry, under the present system, which enables it to turn its output into coin, is, paradoxical as it may seem, the industry that is least affected by the decline in the gold price of silver; and the other export industries which, in proportion as silver has declined, have secured larger and larger amounts of the national coin for the gold in which they have sold their products, will cease to enjoy that privileged position when the monetary reform shall have been consummated, as they will no longer reap the profits which they now secure at the expense, in reality, of the generality of the Republic's inhabitants. This fact has been demonstrated by the labors and investigations of all the subcommittees, especially the fourth; and though such a condition of affairs is detrimental to the national interests, though the new monetary arrangements, which it is sought to establish on sound and just lines, will redound later on to the advantage even of the silver-mining industry and the other export industries, the fact remains that both the former and the latter will suffer a temporary curtailment of their present profits, so that, in our humble opinion, the change ought not to be made brusquely, from one day to another, but gradually and progressively, so that the interests affected may have time to adjust themselves to the new conditions. This object would, in our opinion, be achieved by the mere closing of the mints to the free coinage of silver, which would naturally produce a gradual rise in the value of our silver coins and a corresponding gradual decline in the rate of international exchange.

Perhaps the rise in question might suffice to bring about legal parity either at once or very soon. If this were to occur, certainly we would not be in favor of preventing or checking that rise by artificial means, for the mere fact of the rise being the result of the natural conditions of the exchange market would afford ground for inferring that the interests affected had been able to adjust themselves to the altered circumstances; otherwise silver mining and the export industries would have been paralyzed to a greater or less extent, and as that paralyzation would have entailed a curtailment of the supply of gold in the home markets it would have materially hampered the attainment of the legal parity which we are now supposing to have been realized.

22. In rebuttal of our argument based on the danger that would be incidental to the brusque and artificial establishment of the legal

parity, it has been urged that the country is accustomed to violent fluctuations in the rate of exchange and it is inferred that one more fluctuation would not produce disastrous consequences, principally because it would be the last and would lead the way once for all to the wished-for stability. Frankly, we must say that this argument is far from reassuring us; for, though it is true that the country has passed through brusque and unexpected variations in the rates of exchange, those variations are none the less an evil which, as a matter of principle, it is not permissible voluntarily and deliberately to court, and, moreover, there is a difference between putting up with alternations of rise and descent and confronting a definite and lasting fall of exchange rates.

23. The immediate creation of the gold reserve fund might be recommended, as it has been at some of the debates of the fifth subcommittee, as a means not of at once attaining the legal parity, but of bringing about, with a certain degree of prearranged regularity, a gradual and progressive improvement in the rate of exchange. In our opinion this system would also be very dangerous, for it would vest exclusively either in the authorities or in a special body to be appointed by the authorities the absolute control of the exchange market, without allowing any scope to the natural causes which ought to govern it and to have free play, unless, indeed, it should appear that other artificial causes are at work to impede the success of the reform, in which case measures for the removal of those causes would be warranted.

On the other hand it would appear very difficult, not to say impossible, to map out in advance a programme that should embrace a period perhaps of years for the gradual realization of the stability of international exchange rates, and in any event it is certain that the gradations, however prudently they might be calculated, would afford a wide margin to speculation, of which the basis would be all the more secure in proportion to the confidence felt in the Government's ability to carry out its prearranged programme. Its modus operandi would consist in the introduction, in the first instance, of a gold capital which would be exchanged for a given quantity of pesos, and with these pesos more and more gold would be bought as the rate of exchange continued to fall. It may be said that in this way the introduction of foreign capital would be encouraged. True; but its object would not be to promote the welfare of the country, but deliberately and hurtfully to exhaust its resources by speculating with them and this, far from deserving encouragement, ought to be prevented as much as possible.

24. Another drawback which we find in the immediate creation of the gold reserve fund lies in the sacrifice which it would in one form or another impose on the country by augmenting its public debt in gold, a contingency which, were it only on account of the disfavor with which it would be received by the public, might be attended with dangers of another sort on which we need not dwell, but to which the Government will assuredly give due weight, without any necessity on our part of pointing them out.

25. Moreover, the reasons that have been invoked for creating the fund are, it seems to us, far from being conclusive.

It was stated during some of the discussions of the fifth subcommit-

tee that there might be reason to fear the organization of a combine, for the purpose of maintaining the high rates of international exchange, for the benefit of the silver-mining interests and the export interests in general—interests represented by communities which, though not numerous, wield considerable financial power. We believe that the Government would not remain inactive in the new situation and that its moral influence, supported as it would be by the banks, by importers, and, above all, by all the legitimate interests of the country, would suffice to baffle a monopolistic combine of this nature in the event of its coming into existence.

26. It has also been said that the country's trade balance is always adverse and that it has only been settled hitherto through the investment, on a large scale, of foreign capital. The fact is unquestioned and we have no thought of controverting it; but the monetary reform will in no way discourage further investments, rather it will stimulate them, however slender its immediate effects may be, for in any event it will constitute a moral and material improvement over present conditions.

Moreover, the more adverse our trade balance is made out to be the greater the danger of creating a reserve fund in gold, for the greater will be the risk of its being exhausted rapidly and to no purpose; for, inasmuch as the stability of international exchange depends, as we believe we have demonstrated, on the equilibrium between the demand for gold and the demand for silver coin, it would seem natural, in order to bring about that equilibrium, to place reliance on the economic forces of the country rather than on the mere existence of a fund necessarily limited in amount and of which the utility, if it exists at all, may consist in meeting temporary or accidental wants, but never the wants that are permanent. In other words, if our trade balance is chronically on the wrong side, the live forces of the country alone can modify that condition; and if the lack of equilibrium is only temporary or accidental, it is desirable in any case to know the efficacy of those forces and, if necessary, to impart to them such stimulus as to enable them alone either to curtail our gold requirements or to augment the amount due to us in that metal. To act otherwise is to take a leap in the dark or to blunt individual initiative, which is more powerful than that of the best and wisest government.

27. The immediate creation of the gold-reserve fund is attended with another very serious danger which we can not pass over in silence. Though it might inspire some capitalists with confidence in the material success of the reform, it might be viewed in a different light by other capitalists either because they might consider its amount insufficient or for any other reason. If this were to occur, and it must be allowed that the contingency is, to say the least, not impossible, the existence of the gold-reserve fund might produce the very opposite effect to that intended, as it might occasion, if only temporarily, an exodus of foreign, nay of native capital, eager to seize the opportunity for conversion into gold at a favorable rate. If, in addition, one takes into account the fact that speculation might take a hand either in starting or accentuating a sudden withdrawal of capital of this nature (for, as one of our distinguished colleagues who is a partisan of the fund has well said, speculation always succeeds

in finding an open door and a locus standi) it will be owned that our apprehensions can not be regarded as excessive.

28. It has been argued, as against our point of view, that the system whose adoption we recommend is based on currency contraction, which, if considerable, may occasion most hurtful results, and in support of this argument we have been invited to contemplate the example of British India, whose government lamented with all the emphasis permissible in official documents the evils accruing to the people of India in consequence of the currency contraction, which it is affirmed had to be resorted to in order to raise the rupee to the level which the British legislator had fixed.

We might say much as to what happened in British India in this connection, for there are not lacking solid grounds, also sanctioned by official documents, to believe, on the one hand, that the improvement which occurred there in international exchange rates was not due exclusively to the contraction or rarefaction of the currency, but also, in no small degree, to other general circumstances which led to increased offers of gold and which fully and clearly bear out the economical principles expounded by us in the foregoing paragraphs; and, on the other hand, that the high rates of bank discount which were especially noticeable in 1898 and which the Indian government attributed solely to a scarcity of the circulating medium, had occurred in previous years and were probably due to famine and pestilence, which in that country constitute a periodical calamity deranging all conditions.

We will not make these assertions without proof, and we take leave here to copy the passages bearing on the point from the very noteworthy and important report rendered in 1898 by the celebrated committee of which the chairman was Sir Henry H. Fowler. The passages in question are as follows:

"In the first place we desire to point out that it has not been proved that the rise in the value of the rupee since 1894–95 is due solely to relative contraction of the Indian currency, and it may be that it is not due mainly to this cause. It is not certain that there has been any contraction of the Indian currency which has materially affected the exchange, though it may not unreasonably be inferred that there must have been some contraction and that such contraction has had some influence on the exchange value of the rupee. On the other hand, there are causes other than contraction of the currency which affect the value of the rupee and the exchange with London. Large borrowing in London on account of India, reduction of the drawings of the secretary of state, an increase in the exports from India unaccompanied by an equivalent increase in imports, as well as a general rise in gold prices, would all affect the rate of exchange with India, though it is quite impossible to estimate the relative importance of these factors among themselves or the amount of their influence on exchange as compared with the effect of a contraction of the currency or to state the precise degree of influence which any or all of them have had on any particular alteration in the exchange. Nor, on the other hand, is it certain that the unusually low rate of exchange that prevailed in 1894–95 was due solely to a relative redundancy of the Indian currency. The closing

of the Indian mints necessarily brought into play many disturbing influences which may have affected 1894–95.

"Since the mints were closed there has also been large borrowing on Indian account, and there have been in some years large reductions below the normal amount in the public remittances from India, while fluctuations have been experienced in the foreign trade of India due to famine and plague as well as to other causes. All these causes must at different times have affected the exchange either favorably or unfavorably.

"Another influence which must have had a favorable effect on the Indian exchange is the reduction in the imports of silver due to the closing of the mints. The average yearly net import in the three years preceding the closing of the mints was 43,133,678 ounces of the value of Rx. 12,020,296; and for the three years ending 1898–99 the average net import was 31,126,376 ounces of the value of Rx. 6,103,431.

"In the face of the facts we have just stated, we are unable to accept without qualification the opinion that the rise in the value of the rupee since 1894–95 has been due wholly or mainly to a relative contraction of the Indian currency. We are not prepared to say that the contraction of the Indian currency has not been an important factor in the rise of the Indian exchange, but so long as the facts of the case are surrounded by so much obscurity we consider that it would be unsafe to base action of so drastic a character on this assumption.

"If it be the case that the rise in the value of the rupee since 1894–95 is not due wholly or mainly to the relative contraction of the Indian currency, it follows that an additional contraction of that currency, produced artificially by the withdrawal of rupees in the way proposed by the government of India, might not have so much effect in strengthening exchange as the government of India believed; and though we accept in principle the proposition that a reduction in the number of rupees tends to increase the value of the rupee, we are not prepared to admit that such effect must necessarily be direct and immediate; nor are we satisfied that such reduction, carried out on a large scale and within a limited period, might not aggravate, if it did not produce, a period of stringency in the Indian money market.

"Dealing first with the question of discount rates, it will be sufficient to remark that the anticipations of increasing stringency have not been verified during the recent busy season. Whereas the minimum rate of the Bank of Bengal was 10 per cent on 6th of January, 1898, rising on 24th of February to 12 per cent (at which figure it stood until the 27th of April, 1898) and did not fall below 10 per cent until the 16th of June, 1898, the rate for the busy season of 1898–99 has never exceeded 7 per cent, and this though the total volume of India's sea-borne foreign trade exceeded Rx. 210,000,000 in 1898–99, as against (under) Rx. 199,000,000 in 1897–98.

"While it may be questioned whether banking arrangements in India might not with advantage be strengthened and adjusted to the growing requirements of Indian trade, we can not doubt that one of the main causes of the stringency of 1897–98 was the reversal (necessitated by the exceptional circumstances of India at the time) of the relations of the government of India and the money market in the

autumn of 1897. In ordinary years the government is able, through the sale of council bills and telegraphic transfers, to place large sums at the disposal of the money market throughout the autumn and winter. Thus, during the last four months of 1894, the bills and transfers sold by the secretary of state amounted to Rx. 8,052,000: in 1895, for the same period of the year, the amount was Rx. 9,888,000; in 1896 the amount was Rx. 6,056,900. But in 1897, owing to the depletion of the balances of the government of India, brought about by expenditure on famine relief and military operations and by failing revenue, the secretary of state was unable, from the 1st of September to the 15th of November, to offer bills or transfers for sale and was compelled to purchase drafts on India for Rx. 1,000,000. Thus, during the last four months of 1897, the amount placed at the disposal of the Indian money market in the presidency towns in consequence of the remittance transactions of the government was only Rx. 332,700, or Rx. 5,724,200 less than the year before.

"It must not be forgotten that high discount rates were not unknown in India under the system of open mints. For example, the bank rate reached 12 per cent in April, 1890 (in which year the rate did not fall below 10 per cent from the 10th of February to the 24th of April), while in 1889 12 per cent was quoted continuously from the 21st of February to the 28th of March, the rate not falling below 10 per cent from the 17th of January to the 11th of April of that year." [a]

29. There is therefore good ground for not accepting as axiomatic the twofold statement that the enhancement of the value of the rupee in British India was due exclusively to currency contraction, and that the contraction in question was exclusively responsible for the very high rates of bank discount. In any case, we may be allowed to observe that the circumstances under which India's currency reform was affected were exceptionally adverse; for, though the conventional gold value which it was sought to give to the rupee was not far removed from its bullion value at the time when the reform was decreed, the effect on the silver market of the closing of the Indian mints, coinciding as it did with the repeal of the Sherman act in the United States, was truly disastrous, causing a decline of the white metal without precedent until then. In the first volume published by the monetary commission under the heading of "Data for the Study of the Monetary Question in Mexico" may be found a very interesting paper by the American economist, Mr. Piatt Andrew, on India's currency reform, accompanied by a table and diagram which illustrates very strikingly the point which we are considering. We would for the sake of brevity refer the reader thereto. We are far from advising such high aspirations here, as will be seen later on; and it is therefore fair to hope that our difficulties will be considerably less. Nevertheless, inasmuch as it is impossible to forecast with any hope of certainty the future course of events, especially in regard to that all-important point—the future gold price of silver—we can not deny the possibility of conditions arising which would necessitate a resort to special measures which were not adopted in India. We may be permitted to repeat that what we desiderate is that the interests

[a] Report in questions Nos. 21, 22, 23, 45, and 46.

involved shall be allowed free scope, and shall not be disturbed nor interfered with unless adverse agencies arise which it may be necessary to remove or counteract.

30. In the respectable and erudite opinion given by one of our enlightened colleagues, Lic. Joaquin D. Casasus, it is affirmed that currency contraction will require a long time to make itself felt here, and will even prove inefficacious to stabilize exchange in the Republic; or, in other words, to enhance the gold value of our coinage, for four reasons, which it becomes necessary to examine were it only for the weight which the mere name of Mr. Casasus gives to any opinion expressed by him. Mr. Casasus says in this respect:

"The suspension of the free coinage of silver would not suffice to stabilize international exchange:

"1. Because Mexico, despite the progress which it has achieved, absorbs annually a very slight quantity of coin, and therefore the enhancement of the value of the circulating medium would have to be the work of a great many years.

"2. Because in Mexico a scarcity of currency would be more than compensated by an increased coefficient of the rapidity of its circulation.

"3. Because, although Mexico produces gold, there is no gold in circulation and no stocks of that metal accumulated in the banks.

"4. Because Mexico has an adverse trade balance and only settles same by means of the foreign capital that seeks investment in the country."

The first proposition is based on monetary statistics, which seem to prove that between the years 1877–78 and 1901–2 the additions to the circulating medium of Mexico only averaged about $5,000,000 per annum. Granting that these figures are accurate (though it would not be impossible to question them), and granting also that those additions are less than the normal additions in other countries in proportion to the population (which is a point that, owing to lack of time, we have been unable to determine by the examination of foreign statistics), the phenomenon is still, in our opinion, far from being conclusive, for it fails to take into account the fact that since 1882 the use of bank notes, which formerly circulated on an extremely limited scale and that only in the City of Mexico, has sprung up among us. That year witnessed the foundation of our foremost institution of credit—the National Bank, and of the Mercantile Bank, which was consolidated with the former in 1884. The old London Bank of Mexico and South America, transformed into the present Bank of London and Mexico, has expanded considerably. Under the law of March 19, 1896, the small local banks which previously existed have acquired a legal status, and, above all, the State banks have multiplied to such an extent that it may be said that there is now no State in the Federation that has not its bank, not to speak of the numerous branches which the National Bank of Mexico and the Bank of London and Mexico have established. As was natural, especially in view of the fact that hitherto the banks of issue of the Republic have been fortunate enough to avoid all stumbling blocks in their path, the use of bank notes has become very general, replacing to a large extent the use of silver coin. The very full banking statistics prepared by the executive board of the monetary commission, and which will be issued in a few days (perhaps simultaneously

with this report), demonstrate this fact in all its interesting details. Here we only give the figures in regard to the stock of metallic money held by the banks on December 31 of each of the years mentioned, the note circulation on same date, and the difference between the two:

Year.	Cash holdings.	Note circulation.	Differences.
1882	$1,850,722.28	$3,194,419.00	$1,343,696.72
1883	2,251,534.50	2,236,897.00	E14,637.50
1884	4,495,003.28	5,174,069.00	679,065.72
1885	5,615,663.35	6,275,559.00	659,895.65
1886	8,753,022.75	11,245,491.00	2,492,468.25
1887	12,479,066.75	13,981,539.00	1,502,472.25
1888	17,865,146.21	18,979,520.00	1,114,382.79
1889	15,188,148.28	20,403,919.25	5,215,770.97
1890	17,291,660.14	22,973,902.50	5,682,242.36
1891	17,315,922.37	23,628,728.99	6,312,806.62
1892	17,873,867.65	25,298,760.85	7,424,893.20
1893	20,120,288.18	24,581,966.97	4,461,678.79
1894	30,721,142.78	28,969,682.78	E1,751,460.00
1895	38,554,437.78	33,439,315.57	E5,115,122.21
1896	42,947,348.07	37,967,105.00	E4,980,243.07
1897	34,275,390.72	44,808,252.75	10,532,862.03
1898	38,654,813.57	54,375,769.25	15,720,955.68
1899	51,357,730.76	63,196,832.50	11,839,101.74
1900	49,394,761.03	64,012,464.75	14,617,703.72
1901	56,213,408.73	71,257,626.50	15,044,217.77
1902	54,663,029.82	86,145,227.00	31,482,197.18
1903 [a]	55,404,865.81	84,272,796.25	28,867,930.44

[a] The figures for this year are only up the end of October.
E means excess of cash holdings over note circulation.

The table shows, as was theoretically to be expected, that both the note circulation and the difference between that circulation and the stock of silver have increased substantially, and if the matter be rightly regarded, that increase constitutes in reality as effective an addition to our circulating medium as if it had consisted of hard silver coin.

To a certain extent this same fact affords solid ground for combating the second of the propositions which we are considering. It is indeed just possible that greater rapidity might be imparted to our circulation. But if we consider the increased use that is made of bank notes; that the note issues of most of the local banks have for months past almost reached their authorized limit and are still close thereto; [a] that finally the use of checks and other instrumentalities of credit, formerly almost unknown, has become very general owing to the growing familiarity of the people with banking methods, it must be owned that our circulation, considering the volume of our industrial and mercantile transactions, has already attained a considerable degree of celerity and that it is not likely that it can be quickened in future in the same proportion as in the past. Nay, it might even be considered wise to advise the Government to look into the question of note circulation, owing to the influence which it may exercise upon the solution of the monetary problem if left in its present state.

We certainly will not offer any such suggestion, though only for the fundamental reason that this phase of the banking question was not among the points about which we were consulted. We do, however, think it fair to state that, in view of the proportions which the note

[a] See bank statements for October 31, 1903.

circulation has reached, it is not likely to expand further nor to curtail the country's capacity to absorb a larger quantity of silver coin than it already holds.

The third reason adduced by Mr. Casasus does not seem to us to have any bearing on the point at issue. It is quite true (and we have already stated the fact in our No. 7.) that "although Mexico produces gold, there is no gold in circulation and no stocks of that metal accumulated in the banks;" but this fact does not seem to us to constitute the least warrant for the proposition that the limitation of the quantity of silver coin in circulation is incapable of bringing about an enhancement of its value in gold, which is the contention of Mr. Casasus. On the contrary, if there is no gold in circulation that fact will contribute to strengthen the silver coinage, which thus will not have to overcome a powerful rival. This is precisely the reason why we recommend that gold should not be coined at once, as will be seen shortly.

In regard to the fourth reason, which involves our trade balance, we have dealt with it in our No. 26, and we do not think it necessary here to repeat what we have said.

31. Our esteemed colleagues who favor the immediate creation of the gold reserve fund have dwelt at such length on the dangers of currency contraction that we can not refrain from returning to the subject to the extent of making two simple observations.

The first is that the currency contractions which we now suffer are irremediable, both because the free coinage régime occasions temporary and unnecessary inflations of our circulation, followed by an exodus of the surplus of coined silver, and because the brusque and wide fluctuations in the price of that metal actually shut off our banks from the temporary introduction of gold capital; but, under the new régime, such capital will be able to enter safely on the same footing, as in all other civilized nations, either directly or in the form of credits to our banks, in quest of the profits accruing from a high discount rate, as soon as a tendency thereto becomes apparent. If this is to occur, and we see no reason why it should not occur, as soon as the monetary situation of the Republic shall afford an assurance that such capital may be withdrawn or refunded without fear of serious losses due to the oscillations of exchange, it would seem that there is no ground to suppose that the scarcity of the circulating medium will go to dangerous lengths.

Finally, the operation of the gold reserve fund, which we are now considering, would also involve the withdrawal from circulation of a volume of silver coin, varying according to the amount of the fund. So that if currency contraction constitutes an evil, that evil will be rather aggravated than eliminated by the creation of the reserve fund.

32. It has also been argued that, since the desideratum is to impart a fixed value in gold to the currency, the Government ought actually to guarantee that value by making the silver coins interchangeable for gold at the legal parity and at the will of their possessor. In our opinion this reasoning is wholly erroneous. The Government's guaranty in the matter of coinage is, first, that each coin really contains the quantity of metal provided by law, and secondly, that the Government, which issued it, will in turn receive it in payments made to it on the same terms as attended its issuance. Moreover, if, in accordance with the plan which we propose, a silver coin shall be issued in

exchange for a quantity of gold of greater value than the silver contained in such coin, it will be a moral obligation on the part of the Government not to convert the difference accumulating in its coffers into a source of fiscal profit, but to keep it in order to uphold the enhanced value of the coin which it has issued, for otherwise public confidence would easily be lost. Until such time as this contingency arises, that is to say, until such time as private persons shall deliver gold in exchange for silver coin, the creation of an obligation on the part of the State to pay out gold in exchange for circulating silver coins would constitute a privilege in favor of the holders thereof for which the rest of the nation would have to pay; it would, in fact, be equivalent to a simple and unadulterated introduction of the gold standard with gold in circulation, for assuredly no holder of silver coin would fail to change same for gold if the matter depended merely on his own will and pleasure.

33. We also think that the basis of facts which have been available to us for studying the monetary problem, though sufficient to enable us conscientiously to advise a change from the present régime, which is sapping the strength of the nation and sacrificing all its legitimate interests for the benefit of the persons who control the silver mining industry and the export industries, do not enable us to forecast the exact point which the effects of the closing of the mints will reach, for many of the data necessary for an accurate forecast of this nature are unknown to us. In the first place we are ignorant, as we have already said, of the quantity of coin in circulation; we are also ignorant of the exact degree of elasticity which our circulation has acquired or is capable of acquiring as a consequence of the growing expansion of institutions of credit, and especially of the already very considerable use of bank notes. And the worst is that under the present régime of free silver coinage, of which the first result is to determine brusque and continual fluctuations in the quantity of coin in circulation, it is impossible to arrive at even a reasonable approximation to the facts in regard to this and other important factors of the monetary problem.

34. It is, therefore, necessary in our opinion to modify existing conditions by closing the mints; but to go beyond that point, to endeavor all at once to stabilize exchange by methods so costly and so fraught with serious dangers as is the immediate creation of a considerable reserve fund in gold, seems to us hardly wise or prudent.

For these reasons our plan of reform only suggests the immediate cessation of the free coinage of silver. If after the lapse of a certain period of time the measure in question, supplemented by other indirect measures tending in a natural manner to the attainment and maintenance of stability of exchange, does not suffice to bring about the enhancement of our coin, it will be time for the Government to consider whether it ought to ask the country to bear the sacrifice necessary for the creation of a gold reserve fund, in order to bring a decisive influence to bear on the internal market. To act otherwise, would, if we may be excused the frankness of our expression, be to yield to an impatience that is incompatible with the delicate reserve and the natural caution that ought to be exercised in acts that affect the vital interests of the social organism.

35. The fear has been expressed that, unless the gold reserve fund is created, the necessity of settling our trade balances will lead us to the extreme of having to export our silver coins under the new régime

at their bullion value, as is the case at present. We regard these fears as simply fantastic, unless it be held that economic laws, which elsewhere have produced and continue to produce given results, will not produce those results here, and that "Mexico is still the land of anomalies," as used to be said in times when, owing to a very imperfect observation of facts and social phenomena, many persons failed to understand that the premature and hasty adoption of principles and laws, embraced and proclaimed by nations far more advanced than we were and also very differently situated, could not be followed by the same consequences here as in those other nations. Wherever the free coinage of silver has been suspended or abolished without a single exception, as far as we know, the silver coinage has been enhanced above its bullion value, and in this respect we consider worthy of special mention the unique instance of the paper currency of Austria-Hungary, which, though redeemable only in silver, attained a higher valuation than the bullion value of the coin for which it stood, due solely to the principle of limitation (not contraction or scarcity) in the issues of the paper in question.

The experience of Spain is also, in our opinion, singularly suggestive. The only coin in circulation in that country is unlimited legal tender silver, for gold, of which a relatively small quantity is held by the Bank of Spain, is beyond the reach of the public and constitutes no sort of guaranty for the circulating coin. On the other hand, the Government of the Peninsula, in the distressing days of the late war, coined positively enormous quantities of silver in order to avail itself, for revenue purpose, of the difference between its bullion value and the value ascribed to it by law after coinage; and this fact has made exchange adverse to Spain, as was to be expected and is now officially affirmed by the most conspicuous statesmen of that country. Nevertheless exchange has not touched nor even approached the level of the coinage's bullion value, and this, in the opinion of the economists and statesmen of Spain, is due wholly and exclusively to the fact that the Government reserves to itself the right of coining silver.

36. There is, therefore, in our opinion no room for doubt that when the new régime shall once have been introduced our coinage will acquire in internal markets a value in excess of its bullion value; that, in consequence, its holders will have a definite interest in not exporting it, for they will understand that they would have to lose the benefit of that extra value abroad; and that, in a word, the mere closing of the mints to the free coinage of silver will, to a greater or less extent, cause a disassociation between the coinage value and the bullion value of the new peso which will prevent that peso's exportation. Only one circumstance could produce a different result, viz., an extreme superabundance of coin, and though there is every reason to believe that there is no such superabundance, still, if the contrary were the case, that is to say, if it should be found that the country was possessed of a much larger quantity of coin than is needed for internal exchanges, then it would be highly advantageous were the excess to leave the country and go to the melting pot at its bullion value, without loss to its holders and without imposing on the Republic the sacrifice of redeeming it in gold at the legal parity. There would soon become manifest a tendency to the ratio so often alluded to by us between the silver coinage and gold, giving rise to an enhancement in the value of that coinage and then individual interests, which are

more active and vigilant than the best and most zealous government and which would have much at stake in the success of the reform, would not be long in rendering it effective without perturbations and without shocks.[a]

37. To sum up, in concluding this perhaps already too lengthy portion of our report, we will say: That primarily we trust to the closing of the mints to the free coinage of silver to bring about the success of the plan of reform which we have taken leave to propose. If that measure suffices immediately to insure the legal parity, which we doubt, well and good. If it does not, we at least feel sure that it will at once occasion an enhancement of the gold value of the new silver coin; that that enhancement will, to the country's advantage, be gradual and progressive, but that if, owing to causes which we can not foresee, the event proves otherwise, then the moment will have arrived for creating a gold-reserve fund in order to hasten the attainment of parity.

If the matter be rightly considered, this was the course of the Government of the United States in providing for monetary reform in the Philippines, for Congress did not at once ordain the immediate creation of the fund, but simply authorized the government of the islands to institute a special fund for the maintenance of the parity between silver money and gold, and we, for our part, suggest that the legislative measures to be passed for the execution of monetary reform in the Republic should include powers to the Executive to create the gold-reserve fund which has occasioned so much discussion. We do not think, as will be readily understood, that this is like counseling the Government of the Republic to experiment with a reform of doubtful results. On the contrary, we firmly believe in the practical efficacy of our suggestion, but recommended a prudent course, like that of a commander in chief who, considering victory sure by only using a portion of his forces, should decide not to bring the whole of his army into action, but rather to hold in reserve the other portion, perhaps the best portion thereof, to be ready for unlooked-for contingencies, not arrogantly imagining that those contingencies may not arise simply because he can not foresee them.

B. Ratio between gold and silver money.—38. Before decreeing monetary reforms similar to that which we are contemplating, other nations have carefully considered whether, in closing their mints to the free coinage of silver, with a view to the adoption of the gold standard, it was expedient to fix at once the rate or ratio which was sought to be attained between the silver coins and gold. In the two instances that are known to us, Peru and British India, the question was in reality answered in the affirmative. If this is not done in our case the entire aim of the monetary reform will be enveloped in perilous vagueness, more calculated to arouse distrust and paralyze the economic activities of the country than to inspire confidence in the

[a] In connection with this point, viz., the danger that the new coin may be exported, it has been suggested that it would be well to prohibit that exportation by law. This idea, which has not been expressed by any member of the fifth subcommittee, was no doubt suggested by the fact that at various times the exportation of coin has been prohibited; but it does not seem necessary to refute the idea in question specifically, for it is now generally recognized that a measure of this nature, besides being vexatious and tyrannical, would constitute a grave economical error, which, in view of the culture we have attained, it would not be permissible for us to repeat.

new régime, not to speak of the necessity of establishing a clear basis whereon new issues of silver coin may and ought to be made in order to meet the requirements of expanding transactions. These reasons have appeared to us to be conclusive, and, consequently, they have moved us to lay down as the second of the fundamental bases of the plan of monetary reform, that, when it is enacted, a ratio between gold and the new silver dollar shall be fixed.

39. What is that ratio to be? The fourth subcommittee, taking as a base the average gold price of the white metal from 1893 to 1902, has urged, with abundance of sound reasons, the expedience of adopting a ratio that shall be not less that 1 to 36 nor more than 1 to 32. This view was combated by no one except Mr. José de Landero y Cos, who expressed the belief that even the latter of the two ratios did not leave a sufficient margin to insure the maintenance of the new coin at a higher value than its mere bullion value, because the rise of silver during the closing months of the present year, a rise characterized by unaccustomed firmness, showed indications not only of being sustained, but even of being accentuated, until the relationship between gold and silver should approach, or perhaps even attain, the ratio of 1 to 32.

40. For the reasons above stated, which facts have continued to sanction down to the present time, it was decided in order that the labors of the fifth subcommittee might have a concrete base, to adopt hypothetically the ratio between gold and silver of 1 to 32. Subsequently the undersigned have thought that it was expedient to take into account the average gold price of silver even during the current year and in general for ten years preceding the monetary reform, and this for several reasons, of which the chief is that it seems neither fair nor politic not to take into consideration, as far as possible, the conditions which bear upon the present moment, for in a question so grave as is the determination of the precise point at which exchange is to be stabilized great care must be taken not to wrong existing interests and not to aggravate the situation of debtors. Interests which came into existence in times past, even in times long past, are also entitled to great consideration; but inasmuch as it would be impossible to mete out to all the satisfaction that they might desire, it must be borne in mind that interests of long standing must, if they continue to exist, have adjusted themselves to new conditions and are, therefore, to be treated in the same manner as interests of more recent creation.

41. On the other hand, considering, as did the fourth subcommittee, in its report of September 13 last, that the enhanced value ascribed to the new coin ought not greatly to exceed the bullion value of that coin, based on the average of the last ten years, we have sought to impart to our suggestion a greater degree of precision than is implied in a mere numerical ratio, which is not always clear to all, and thus we resolved to adopt the formula contained in the second base of the accompanying plan of reform, by virtue of which the gold value of the new dollar will be fixed on the basis of the average gold price of the Mexican dollar in the last ten years plus an addition not to exceed 10 per cent. The result will, we believe, be approximately identical with that suggested by the fourth subcommittee and perchance possesses the advantage of greater clearness and precision.

OTHER BASES OF THE PLAN OF MONETARY REFORM.

42. The two bases of the plan of monetary reform, the adoption of which we have taken leave to recommend and for which we have endeavored to give our reasons in the foregoing numbers, 12 to 41, are, in our opinion, fundamental and indispensable. There are other bases, however, which we consider of importance and for which the reasons deserve to be given. We, therefore, now take up this portion of our task.

A. Coinage of gold.—43. Messrs. Manuel Fernandez Leal and Joaquin D. Casasus who, as members of the fifth subcommittee, undertook to study the question of the expediency of the immediate coinage of gold on the hypothetical basis above mentioned, viz., that the ratio to be adopted between gold and silver would be that of 1 to 32, have, in a special report which forms part of the present collection of documents, recommended that gold be coined at once, unrestrictedly, and without charge, in pieces of five and ten dollars.

We must in the first place state that we have adopted almost all the conclusions of the important report in question, and have embodied them in the plan of reform which we have the honor to propose. Nevertheless, we have been unable to adopt two of them, viz., the immediate opening of the mints to the free coinage of gold, and the provision that the coinage shall be free of charge.

44. The reasons for our dissent from the former conclusion are largely cognate with those which we have expounded at length when discussing the closing of the mints to the free coinage of silver and the immediate creation of a gold-reserve fund. If the principal agency to be employed in the establishment of parity between silver coins and gold consists in supplying silver when gold is offered therefor, it seems to us absolutely essential that the actual circulating medium should, during the initial or transition period, consist solely of silver coins, and that no gold be coined. For, until parity is attained, the following dilemma seems to us unavoidable: Either gold will not be coined for circulation, in which case the facilities which it is proposed to provide will be useless, or it will be coined for circulation and will actually circulate, in which case it will materially interfere with the attainment of legal parity, for no person holding gold will be willing to part with it for silver currency at the rate provided by law while having at his disposal the Government's coining machines to supply him with a coin of unlimited legal tender, which he will not give up save at a premium such as is ingrained in our commercial habits owing to the depreciation of the present silver currency.

45. Our situation is not identical nor even similar to that of the nations which, being under the régime of the free coinage of gold and silver, only closed their mints to the latter, so that gold might not be dislodged from circulation by virtue of the well-known economic law enunciated by Gresham, viz., that a bad or inferior money drives out a good or superior money. Unfortunately, circumstances did not permit the Republic to imitate the example of those other nations at a time when gold used to circulate here conjointly with silver. At the present time all the gold which we produce, whether coined or not, quickly goes abroad without performing here any function as money.

In order to retain it here and to bring it back into circulation it will be necessary, in our opinion, to adopt special measures, so that it may not impede the appreciation of the silver coinage, and that when that appreciation has been brought about the yellow metal needed for the internal circulation may not again emigrate.

For these reasons we have decided to propose that the coinage of gold be postponed until the legal parity to be established between that metal and the silver coinage shall have been attained, or until the Government shall deem that gold may be coined without compromising that parity.

46. In regard to the other point of difference, it seems to us that the question as to whether the coinage of gold ought or ought not to be free of charge is rather fiscal than monetary, and therefore outside of our province. We will say, however, that we can not indorse the proposal of Messrs. Fernandez Leal and Casasus.

B. Change of our present silver dollar.—47. We consider that it is sincerely regrettable that the monetary reform can not be accomplished by the mere closing of the mints to free coinage, for the necessity of striking a new coin to take the place of the old traditional Mexican dollar will be attended with difficulties. Those difficulties are liable to be of various kinds, and shortly we will show how we think that they can be overcome. Just now we will confine ourselves to demonstrating the impossibility of allowing the present dollar to remain in circulation if our plan of reform is to be adopted.

48. The case stands thus: Based, as that plan is, on the limitation of the quantity of coin to be used in internal transactions, it is indispensable to change the design of our dollar unless we want to have on our hands a more or less substantial portion of the many millions (hundreds of millions, perchance) of Mexican dollars scattered over the world, particularly in the countries of the Orient, which, as is known, have for centuries used them and continue to use them for currency purposes. Perhaps the whole of that incalculable quantity of dollars which circulate abroad at their bullion value would, when it became known that we were here endeavoring to give an enhanced value in gold to our silver coinage, be returned to us, and this would constitute an insuperable obstacle to the reform by destroying a part, unquestionably the most important part, of its foundation. This, therefore, must be prevented, and no measure seems more conducive thereto than the adoption of a new design for the new coin, although this will assuredly entail an expenditure of which, owing to lack of data, we have been unable to estimate the amount, but which will perhaps be from two to three million dollars.

C. Temporary prohibition against importing the present Mexican dollar.—49. Nevertheless, the time that the operation in question will consume, however expeditiously the work may be handled, will involve a serious danger, the danger that during the period of transition a greater or less quantity of dollars may return to the Republic, as already explained. In order to ward off this danger we would offer the suggestion that a decree be issued a suitable time in advance prohibiting the reimportation of Mexican dollars, subject to the penalties provided for smuggling, which are sufficiently severe, and go in some cases to the length of imprisonment, or subject to such other penalties as may be considered adequate to the requirements of the case.

A measure of this nature, the efficacy of which we have no reason to doubt, in view of the carefulness and present high morale of our custom-house administration, can not be regarded in any way as unjust or arbitrary. Our dollars have ever been exported as merchandise at their bullion value, the lack of commercial relations between ourselves and the Orient precluding the possibility of our having sent them thither as currency. Nothing, therefore, obliges us to take them back as currency, for they only possess that capacity and constitute a claim on the faith of the nation when circulating within the borders of the Republic.

D. Duration of the period of transition.—50. Nevertheless, a prohibition of this nature ought not to be, and can not be, maintained indefinitely, and much less forever, without losing its efficacy. It will always be attended with danger, a danger which will have to be minimized, and for this reason it is necessary, as already said, to change the design of our coin and also to abridge the period of transition as much as possible.

51. In order to achieve this object recourse may be had to various measures of an administrative nature, which it has not seemed necessary to us to point out, including the coinage of money abroad, according to the example set by other nations which regularly and habitually procure their supply of coin in this manner. We have also taken leave to suggest that a portion of the metallic reserves of the banks might temporarily be used, if the banks are willing, and it is to be assumed they will be, for the same object, the banks receiving special certificates for such portion of their reserves from the mints; but a special law would have to be passed, modifying in this respect the present banking law, in order to authorize institutions of credit to compute the certificates in question as metallic money for the purpose of compliance with the precept which fixes the minimum proportionate amount in coin or bullion which they must have on hand in comparison with their outstanding notes.

52. This temporary use of the metallic reserves of the banks, besides helping to abridge the period of transition, will be attended with the additional advantage that it will save the Government from being obliged, as probably would otherwise be the case, to buy silver in order to start coining the new money. But we have no idea of suggesting that these mint certificates should leave the vaults of the banks, both because we consider that there is no call for such issuance and because that issuance would mean the addition, not for a very long period, of another form of fiduciary circulation to the many already in existence.

On this point, which relatively is of minor importance, the undersigned differ from the views sustained at the sessions of the fifth subcommittee by Mr. Enrique C. Creel, views also shared by Lic. Joaquin D. Casasus, Eng. Manuel, Fernandez Leal, José de Landero y Cos, and Lic. Genaro Raigosa.

E. Rate at which the new coin is to be given in exchange for that which is now legal tender—Quantity of silver that the new dollar is to contain.—53. Sundry persons, not indeed including any of our esteemed colleagues, either on the fifth subcommittee or on the monetary commission, have expressed to us the opinion that the present coin ought not to be exchanged for the new coin proposed by us at

par, but that the coin which is now legal tender ought to be subject to a certain rebate or discount.

54. This opinion is based on the assumption that the new coin, which is destined to be worth in gold more than its bullion value, ought to be estimated by the legislator at a higher rate than the present coin from the very moment of its being put into circulation; and it is maintained that this would not be an injustice to creditors under prior contracts, seeing that they would be paid in a superior coin, but that, on the contrary, it would be the way to do the fullest justice both to creditors and debtors, seeing that otherwise the liabilities of the latter would be augmented through their having to pay old debts contracted in coinage of variable value in a coin worth a fixed or nearly fixed amount in gold, and therefore more highly esteemed.

55. That this point of view is entitled to careful consideration is proved by the recent example of the Philippines, where it has been provided that the present silver dollar will be exchanged for the new one at rates which the governor of the islands shall from time to time fix by proclamation, and inasmuch as this question is intimately bound up with another question, viz., whether the new coin is to contain the same quantity of pure silver as the present coin, our arguments will refer to both points jointly.

56. If the Government in issuing the new coins were only to accept the old ones at a discount approximating or actually equivalent to their bullion value, it would contract at least a moral obligation to guarantee the conversion of said new coins into gold, for only thus could the discount be justified. Now, we have already seen the serious drawbacks to such a guaranty and the grave responsibilities which the Government would be assuming for the entire nation. Perhaps it would be preferable—it would certainly be safer—to introduce the gold standard with gold in circulation. If, on the contrary, the authorities confine themselves to giving in exchange for the present coin at par another coin containing the same quantity of pure silver, though of a different design, they impose on the nation no effective liability, or any other kind of liability, excepting the cost of recoinage and the loss from wear, which do not constitute a sacrifice out of proportion with the improvement in general monetary conditions which is sought to be brought about, nor involve the country in risks of unknown, or almost unknown, import. At the worst a not very considerable disbursement will have been incurred, but no opposition will be aroused, and the holders of the present Mexican dollar will not be able to say that the quantity of silver owned by them is being reduced.

57. The point of view of fairness both to creditors and debtors is also important. It is true that debtors, by paying old debts in the new dollar, which will be worth more in gold for purposes of international exchange, will be giving a superior coin and therefore a coin more highly prized or esteemed than the old one, and that thus creditors will be benefited; but it must not be forgotten that to the great majority of debtors and creditors the superior quality of the new coin will not be, so to speak, tangible or perceptible, seeing that they have no direct concern in international commerce and exchange. They would with difficulty understand, if they understood at all,

the reason for the discount on the old coin, and in the meantime the creditor class (and who does not belong thereto to the extent of a small salary or petty wage?) would complain of an apparent injustice, irritating on account of its very inexplicability.

The important point in this matter, which is a most delicate one seeing that it concerns all persons without exception, is, according to the weightiest opinions, that the existing ability of debtors to pay their debts should not be curtailed, and that ability depends on their status as creditors. If, therefore, in this sense, care is taken to conserve the ability of everyone to acquire the wherewith to pay his debts no one can justly complain in his capacity as a debtor.

The enlightened and cultured portion of the nation will not fail to perceive that in the long run there will come about a reduction in the cost of living, and therefore in prices generally; but at first there will be no reduction, as is proved by the unvarying experience of other countries, in small salaries or wages, a fact which it may be remarked incidentally will better the situation of the needy. Moreover, the reduction in question, which will be the result of competition and not of impoverishment, will operate slowly, and will take place in such manner as not to cause inconvenience to anyone, for all old debts will gradually have been liquidated.

58. The question of the quantity of pure silver which the new dollar is to contain is subject in our case to special considerations, which we proceed to explain.

The Civil Code of the Federal District and, in imitation thereof, the civil codes of all the States of the Republic provide that payments or "prestations in money must be made in the kind of money agreed upon, and if this is not possible in that which shall coincide with the real value of the money owed." (Art. 1453 of the Civil Code.) This precept, in spite of its vagueness, economically considered, has doubtless given rise to the engagement which has become almost a matter of course in all written undertakings to pay, viz., that said payment shall be effected in hard dollars of the current Mexican coinage and of the weight and fineness provided by the present monetary law, with the proviso that if said law is modified the creditor shall choose the kind of money in which he shall be paid, the above article of the Civil Code being to that end renounced.

The binding force of such an agreement might be contested on the strength of solid arguments furnished by article 2690 of the Civil Code and article 359 of the Code of Commerce, which are as follows:

"Art. 2690. When the loan is made in money and in a given class of coin the borrower shall pay in the same kind of coin as was received by him, no matter what may be the value of said coin at the time of effecting payment. If he can not pay in said kind he must deliver a quantity of current coin coinciding with the real value of the coin received."

"Art. 359. If the loan consists of money the debtor will pay by returning a quantity equivalent to that received by him, in accordance with the monetary legislation in force in the Republic at the time of effecting payment, and this provision may not be renounced."

Notwithstanding, merchants in general and even the banks introduce in contracts executed in their behalf the old clause mentioned above, and to interfere with the application thereof, regardless of its

inveteracy and the confidence felt by all in its efficacy, would be to create an interminable source of controversies. Moreover, liabilities, which, like debts secured by mortgage, are not commercial, and in respect to which, according to the practice consecrated by usage, article 2690 of the Civil Code has been renounced, are probably governed only by the provision of article 1453 of the same code, above alluded to, and it must be borne in mind that if the new dollar were to contain a smaller quantity of pure silver than the present one creditors might feel entitled to exact from debtors a larger amount in the new coin than that which was promised them in the present one. Whether such a claim would hold good or not (and we will not enter into the question at length here, seeing that we are not competent to pass upon it), the fact remains that it would give rise to many controversies which would be a drag on the monetary reform by making it in all probability very unpopular.

For these reasons we have decided to propose that the new dollar, though conforming to the metric and decimal system, as provided by the general monetary law, shall contain the same quantity of pure silver as the present one, and shall be exchanged for it at par.

F. Subsidiary coinage—Other points of minor importance.—59. The reasons that influenced us in favor of the fineness and weight of the subsidiary coinage whose adoption we recommend are almost wholly the same as those set forth in the comprehensive and conscientious report which Messrs. Fernandez, Leal, and Casasus presented to the fifth subcommittee, with certain modifications accepted unanimously by all of us, the most important of which is the recommendation that the Government retain the 5-cent piece, owing to its unquestioned practical utility, though without specifying the metal of which it is to be coined, for fear that if nickel, which is the most suitable metal, were mentioned the suggestion would cause a bad impression in public, owing to the unfortunate events which occurred in 1883 at the capital of the Republic in consequence of an imprudent emission of nickel coins.

60. The limitation of the legal-tender capacity of the subsidiary coinage seemed to us a necessity, counseled alike by science and the example of other nations, especially if its fineness is curtailed according to our recommendation, which is based on the saving thereby to the treasury and other reasons of public expediency which we do not need to expound on account of their obviousness.

61. Nor does it seem necessary to give any lengthy reasons for the suggestion that in effecting the exchange of the present subsidiary coinage its holders be allowed freedom of choice as to whether they will receive the new money in hard dollars or coins of lesser denominations, especially in view of the fact that we recommend the diminution of the fineness of the latter. There might be persons who would want to receive the same quantity of pure silver as that turned in by them, and in any event it would be well to avoid anything resembling injustice or coercion that might tend to bring the monetary reform into disfavor.

62. The measure which we propose to prevent any excess in the quantity of subsidiary coinage in circulation requires a slightly fuller explanation. Our recommendation is that offices be established in all the chief cities of the Republic at which subsidiary coins presented

in quantities of $100 or multiples thereof shall be changed easily and freely for hard dollars. This is the method successfully adopted by the monetary laws of the United States. But, strictly speaking, any of the other measures which in other nations have been found to produce automatically the desired result would serve our purpose as well. In Great Britain, for example, the token coins are only issued when demanded from the Bank of England, and their nominal value in gold is paid in to that institution. The important point is to prevent any excess in the token coinage that would bring about its depreciation.

63. One of the essential features of any monetary reform such as that which we are now recommending consists in inspiring our own people and outsiders with the necessary confidence that the measures adopted will be carried out inflexibly and with the utmost scrupulousness. In order to achieve this important result it has seemed to us that the execution of the law that may be passed should not be intrusted to Government employees alone, and this not because those employees are incapable of inspiring the desired confidence, but because that confidence will be still stronger if private persons of high standing in the community, under the chairmanship of the citizen who may be at the head of the finance department, are invested with this honorable trust.

Such is the ground for the eleventh base of the plan.

MEASURES TO PROVIDE FOR A RISE IN THE PRICE OF SILVER.

64. The fifth subcommittee discussed a point raised by Mr. Ricardo Garcia Granados, viz., what ought to be done in case, subsequently to the adoption of the monetary reform, the gold price of silver were to rise to a point at which the bullion value of the new dollar should become equal to, or even exceed, legal parity. Such a contingency can not be regarded as impossible if one considers the surprises which the constant fluctuations of silver have had in store even for the most farseeing and well informed persons. To meet such a contingency there would only be two courses: Either to alter the relationship or legal parity adopted when the reform was enacted, or to go, fully and openly, on the gold basis with gold in circulation; and inasmuch as the drawbacks and disastrous consequences of the former course were obvious, the latter was adopted without hesitation or difference of opinion, and in consequence was embodied in the twelfth base of the plan of reform.

MEASURES CALCULATED TO OBVIATE OR DIMINISH THE TEMPORARY INJURY THAT MAY ACCRUE TO EXPORT INDUSTRIES.

65. Messrs. José de Landero y Cos and Carlos Sellerier, as members of the fifth subcommittee, were encharged with the task of making a special study of the measures that might be adopted to obviate or mitigate the evil effects, of a temporary nature, that may accrue to the silver-mining industry and export industries in general from the stabilization of international exchange. The gentlemen in question proposed the abolition of export duties on all domestic products and substantial reductions in other taxes, direct and indirect, on mining, and especially on silver mining. None of us questioned in principle

the expedience of these or similar measures, but the balance of opinion was in favor of not recommending them in a concrete form, inasmuch as they are strongly fiscal in character and, therefore, outside of the commission's province. In this spirit the thirteenth and last base of the plan of monetary reform was framed.

CONCLUSION.

66. Such are the grounds that have decided us to form the plan or project appended hereto and to lay it before the monetary commission and through that commission to the consideration and examination of the minister of finance and the President of the Republic, who will doubtless elect the course that is most conducive to the welfare of the nation with the wisdom which, in so many ways and on so many occasions, they have demonstrated.

67. We do not think that the plan in question contains any novelty or that the monetary question, which it is intended to solve, is as difficult as it has been repeatedly declared to be by the press and in some circles of the mercantile community. In our humble opinion the only difficulty which the question involves consists in carefully ascertaining the facts or phenomena of our economic life, in examining them without prejudice, and then calmly and impartially applying to them principles on which economic science has set its seal of approval and which the experience of all civilized nations has most fully and satisfactorily tested. The former task, that is to say, the ascertainment of facts, has been accomplished by the four subcommittees into which the monetary commission was from the start divided, and they have acquitted themselves thereof with such scrupulousness and comprehensiveness that no one, in or out of the commission, can question the conclusions at which they have arrived. The latter task, i. e., the application to those facts of established scientific principles, is relatively easy and simple, for if, by virtue of individual opinions which can never be completely identical, differences may arise as to matters of secondary importance, the fundamental point of view must be the same.

In thus expressing ourselves we have no thought of depreciating our personal labors with false modesty in order to incite others benevolently to extol them, but simply to reduce them to their proper proportions, claiming for ourselves credit for nothing but the patriotic zeal and absolute sincerity with which we have discharged the task assigned to us when we received the honorable summons to the councils of our enlightened Government.

68. In one respect we do believe that our plan possesses advantages over others, viz., in that its adoption will never and in no case entail serious inconveniences or detriments, nor any such that could not be remedied by a simple legislative enactment of which the action would be immediate and efficacious. If the closing of the mints which, after all, if the matter be rightly considered, is the only measure in our plan that could be characterized as radical, fails to realize the hopes built upon it, and occasions evils instead of the inestimable blessing of fixity of international exchange, with all its incalculably beneficient consequences, it will be very easy to fall back on the present system by reopening the mints to the free coinage of silver.

This does not mean, we repeat in conclusion, that we harbor doubt and distrust or that we are recommending reforms of problematical success. We are simply offering to the most conservative, nay, the most timorous, spirits a consideration that is calculated to reassure them to the fullest extent.

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MEXICO, *December 11, 1903.*

PROJECT OF MONETARY REFORM.

FIRST ARTICLE.

In order to obtain stability or fixity of international exchange the Government should be advised to adopt a monetary system based on the gold standard.

SECOND ARTICLE.

I. The immediate adoption of the gold standard with gold in circulation is not to be recommended.

II. On the contrary, as the most adequate means of bringing about a régime under which gold coins will constitute the chief circulating medium of the Republic, it is advisable to adopt, for the time being, a system that will keep silver coins in circulation in quantities as considerable as possible without impairing the practical maintenance of their parity with gold at the ratio that may be adopted.

THIRD ARTICLE.

In order to realize this purpose the national Government is to be recommended to adopt a plan of monetary reform based on the following clauses:

First.—The mints of the Republic will be closed to the free coinage of silver and the reimportation of the silver dollars that hitherto have been, and still are, legal tender in the Republic, will, with suitable anticipation, be prohibited under the penalties provided for smuggling or such other penalties as may be deemed sufficient.

Second.—I. As the fundamental basis for the new monetary régime a fixed ratio between gold and the silver dollar hereinafter referred to will be adopted, and the Government is to be advised that the ratio in question be determined on the basis of the average gold price of the Mexican dollar on foreign markets during the last ten years, with an increase not exceeding 10 per cent.

II. Gold coins will not at once be minted either on Government or private account; said mintage should be deferred until such time as the silver dollar shall have attained parity with gold and when the circulation of gold coin will not, in the opinion of the Government, impair the maintenance of that parity.

III. The gold coins, when minted, will be 900 thousandths fine; an effort will be made to assimilate them preferably with the American dollar and there will be pieces of $5 and $10 only.

Third.—The Government will proceed to coin on behalf of the nation:

I. A new silver dollar, 900 thousandths fine, containing the same quantity of pure silver as the dollar now in circulation, but with a different design or effigy. In other words, the new dollar will weigh 27.1550 grams and will contain 24.4395 grams of pure silver.

II. Subsidiary silver coins, 800 thousandths fine and of the following denominations, value, and weight:

(*a*) A toston or half dollar, worth 50 cents, weighing 12.5 grams and containing 10 grams of pure silver.

(*b*) A quinto, worth 20 cents, weighing 5 grams and containing 4 grams of pure silver.

(*c*) A dime, worth 10 cents, weighing 2.5 grams and containing 2 grams of pure silver.

III. A 5-cent piece of such metal and other qualities as the Government may deem expedient.

IV. A centavo of bronze of the same weight and other qualities as laid down by the laws at present in force for the existing centavo.

Fourth.—The new coin will be legal tender in the offices of the Federation, the States, and the municipalities, as well as for private persons, in payment of taxes and other pecuniary transactions of every kind originating in law, contract, or any other source, subject to the following rules:

I. The new gold piece (when coined) and the silver dollar without any limitation as to amount.

II. Subsidiary coins, in pieces of from 10 to 50 cents, up to $10 in each payment.

III. The 5-cent piece and the bronze centavo up to 25 cents in each payment.

Fifth.—As soon as the Government shall have in readiness a quantity of the new coins which it considers sufficient wherewith to begin putting them into circulation, it will give directions that they be given out in exchange for the silver dollars, subsidiary silver coins, and the copper centavos which are at present legal tender in the Republic, subject to the following rules:

I. The exchange will be effected at par.

II. As large a number as possible of public and private establishments will have charge of the exchange, so as to accomplish it as speedily as may be and to obviate expenses and trouble to the public.

III. The Government may make arrangements with the banks whereby they will deliver to the mint or mints a part of their metallic cash holdings, receiving in return special certificates from said mints, which will be counted as part of their obligatory reserves.

Sixth.—I. The Government shall only put into circulation silver dollars in such quantity as shall be necessary to effect the exchange of the coins that are now legal tender in the Republic.

II. When that exchange shall have been effected the Government may not put in circulation any additional amount of silver dollars, except upon the receipt in Mexico or abroad of the equivalent amount in bars or coins of gold, according to the ratio established by law, plus

expenses of transportation, insurance, and others, if the delivery takes place outside of the Republic.

Seventh.—I. The Government, in view of the public demand, will decide as to the quantity of subsidiary pieces that are to be coined; but in order that the circulation of these coins may be automatically regulated and may never be excessive, there ought to exist, at least in all the ports and frontier cities where there is a custom-house empowered to handle foreign trade, at the capital of the Republic, and at the capitals of the States and Federal territories, offices where persons may freely and easily obtain hard dollars for subsidiary coins presented by them in amounts of $100 and multiples thereof.

II. If circumstances so demand, an amount of silver dollars, to be kept apart from other resources and holdings of the Federal exchequer and even from the reserve fund to be hereinafter mentioned, may be devoted specially to effecting the exchange.

Eighth.—Without detriment to the adoption of such legislative and administrative measures as the Government may deem expedient, and which shall tend to increase the stock or supply of gold in the home market, and to diminish the gold charges against the nation, or, in other words, to diminish the demand for gold in the home market, or to effect both objects, a reserve fund in gold or in silver will be created, and will be maintained in the Republic or abroad, but wholly independent of the other resources and holdings of the Federal exchequer. Said reserve fund will be formed out of:

I. The surpluses of Federal budget appropriations for the expenses of the mint or mints of the Republic and of the mintage and emission of the new coins.

II. The sums derived from profits or gains of all kinds connected with said mintage.

Ninth.—I. In principle, no attempt ought to be made, brusquely and untransitionally, to bring about by direct Government action the legal parity between gold and the silver dollar, so that the interests of private persons which necessarily, even though temporarily, will be affected by the change of monetary régime, may adjust themselves thereto gradually and spontaneously.

II. Nevertheless, if by the mere fact of the closing of the mints to the free coinage of silver and the other general measures which the Government may adopt in the direction outlined in the foregoing clause, the legal parity between gold and the silver dollar shall take a longer time in materializing than the Government deems advisable in view of the circumstances, then the surest means for bringing about that parity will consist in adding to the reserve fund a sufficient amount to influence the home market for foreign exchange, and by putting into practice the operations described in the following clause:

Tenth.—I. Neither the creation of the reserve fund nor the augmentation of its volume will entail any obligation on the Government to give gold bars or gold coins in exchange for silver dollars.

II. The object of the reserve fund is the sale, when deemed advisable, of gold drafts on foreign parts to satisfy the needs of international exchange, at rates that will improve the rates of the country's home market, with the constant aim of establishing gradually the legal parity between gold and silver dollars, or to maintain that parity when once secured.

III. The sale of drafts will be effected upon payment of their price cash down, in silver dollars, which will enter the reserve fund, and may not be reissued, save in accordance with the rules contained in Section II of clause sixth.

Eleventh.—In the absence of an adequate banking association, which does not exist in our country, a special board or committee will be created, to be appointed and presided over by the minister of finance and public credit, and said board or committee, subject to the terms of the law and administrative regulations, will have charge of the following matters:

I. The superior direction of the mint or mints of the Republic and of all the operations connected with the mintage of the new coins, with their distribution in exchange for the coins that are now legal tender, and the withdrawal of the latter.

II. The direct administration of the reserve fund mentioned in the foregoing clauses with the necessary powers, especially with the power to issue additional amounts of silver dollars and to sell gold drafts on foreign parts, as provided by clauses sixth and tenth.

Twelfth.—If the gold price of silver in foreign markets shall rise so that the silver dollars shall come to possess, with a certain degree of stability, a metallic value equal or greater than that ascribed to them by the legal ratio adopted when the new régime goes into effect, steps will be taken to demonetize the silver dollar and to introduce the gold standard, with the free coinage and use of the yellow metal as a medium of circulation.

Thirteenth.—The National Government will adopt such measures as it may deem expedient which, without impairing the equilibrium of the budget, shall tend to obviate or at least to mitigate, the temporary loss or harm that may accrue to some of the interests connected with silver mining and the industries that produce articles for exportation, as a consequence of the stabilization of exchange.

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MEXICO, *December 11, 1903.*

2. MONETARY REFORM IN MEXICO—EXPLANATORY STATEMENT AND BILL SENT TO CONGRESS BY THE MINISTER OF FINANCE LIC. DON JOSÉ YVES LIMANTOUR.

MEXICO'S MONETARY REFORM—PROPOSED LEGISLATION SUBMITTED BY THE MEXICAN DEPARTMENT OF FINANCE TO CONGRESS LOOKING TO THE STABILIZATION OF THE VALUE OF THE MEXICAN SILVER DOLLAR AS EXPRESSED IN GOLD.

On the afternoon of Friday, November 18, 1904, an epoch-making bill was presented by the finance department to the Mexican Congress.

The bill in question related to measures of monetary reform, its aim being to impart to the Mexican silver pesos, or dollar, a fixed value in gold.

In the preamble or exposé de motifs, the minister of finance of Mexico, Lic. José Yves Limantour, explains the scope and nature of the proposed legislation. The preamble is followed by the bill.

The following is a full translation of both preamble and bill:

Object of the Bill.

In taking, by means of the present bill, the first step designed to solve in practice some of the most serious difficulties involved in the problem of international exchange, the Executive does not propose to set forth all the considerations which a study of the numerous aspects of that problem have suggested to it, still less does it claim to have found a panacea for ills so varied as are those which flow from the monetary situation of the Republic. The former would be a lengthy task and its utility would not be commensurate with its magnitude. It would be necessary to reproduce much that has already been said in the numberless treatises that have been published on the subject, and there would be no object in entering into considerations not directly connected with the points which the Executive has resolved to submit to the enlightened judgment of Congress. And as to remedying all the evils under which our community labors, owing to the deficiencies of our monetary system, the attempt would be presumptuous and absurd, for the remedy is out of the reach of the public powers in a country whose customs and economic conditions do not admit of a radical solution—the only sort of solution susceptible of producing thoroughly satisfactory results.

The object of the Executive is less ambitious but more practical. Instead of enlarging on the views which it entertains on the points which form the subject-matter of public discussion and of proposing a complete plan for the reorganization of our monetary system, it prefers to confine itself to submitting a certain number of concrete measures of which the adoption will suffice to impart a sufficient degree of fixity to the gold value of our currency, and touching only those questions which are intimately connected with the measures suggested.

Dilemma which Confronted the Government.

It would be of no use to give a history of the precious metals or even of the vicissitudes which our national coin has undergone since

the disparity between the value of gold and the value of silver set in and became accentuated. Nor would it conduce to any practical object to speak of the manifold causes which have depressed the white metal or of the many other questions which publicists have discussed in connection with the depreciation of silver. Studies of this nature (which are of undubitable utility when an endeavor is being made to elucidate the fundamental problem and to refute preconceived ideas) have already—seeing that numerous treatises, both official and private, have been published—shed sufficient light on the subject to enable opinions to take definite form.

But it was no easy matter to awaken public interest without running the risk of seriously unsettling people's minds, and of working harm to important and sacred interests, without any countervailing advantage. The fact of the public's being suddenly appraised, one need not say, of the probability of a change in monetary legislation, but of the mere purpose of undertaking a conscientious study of the subject, would have sufficed to occasion a panic in the silver market and to derange the rates of foreign exchange more seriously than ever. The negotiations with the American Government initiated by this department at the beginning of last year, and, subsequently, the noteworthy work done both by the Mexican Commission on International Exchange and by the Monetary Commission which met at this capital, served to prepare public opinion, contributing powerfully to arouse at home an interest in the investigation of the questions connected with currency and exchange, without impairment of confidence, and to familiarize both our own people and foreigners with the capital problem to be solved—that is to say, whether it is desirable to introduce certain modifications in the laws and practices hitherto observed in monetary matters, or whether, on the contrary, the status quo should be maintained, notwithstanding the obvious disadvantages that have accrued to our public wealth, considered in the aggregate, through the depreciation of silver, but more especially through the fluctuations of its value in gold.

This dilemma, having the character of an antecedent question, demanded solution at the hands of the Government, and before accepting either of the two extremes it became indispensable to strike a balance of the advantages and disadvantages that flow, and may in future flow, from the present monetary situation of the Republic, and to determine how probable it is that reforms in our monetary system, well matured and carefully put into practice, may enhance the general welfare.

Advantages and Disadvantages of the Present Monetary Situation.

The advantages and disadvantages in question trace their cause to the common fate which in Mexico has for centuries linked the value of bar silver and the purchasing power of the national coin, and this, their identification, is due to the fact that rarely did the time-honored ratio of 1 to 15 or 16 between the values of the two precious metals undergo any variation, as well as to the fact that, inasmuch as, according to law, the mints of the Republic coin all the silver which the holders thereof offer for that purpose, it has been possible to settle our trade balance either in silver bars or silver dollars. It is unquestioned, therefore, that any opinion formed as to the influence of our

monetary system on the development of public wealth, hitherto accomplished, will depend on the view held in regard to the advantageous or disadvantageous effect which the depreciation of silver and the oscillations in its value may have exercised, or may in future exercise, on the prosperity of the country.

The intimate connection that exists between the variations in the value of the white metal and the oscillations in the rate of foreign exchange, in which the purchasing power of the Mexican dollar is most perceptible, is the essence of the problem, for, inasmuch as the relative fixity that had subsisted for centuries in the ratio between the two precious metals has disappeared, perhaps forever, we can not expect that our dollar will be able of itself to recover in international markets its former price or any other price that will be stable. Can that stability in the rate of foreign exchange be brought about by means coming within the scope of the Government's action, whatever may be the variations in the price of the white metal? This is a question which I will endeavor to answer further on.

Influence of the Depreciation of Silver on the Development of Public Wealth.

The development of export industries and of all industries that have benefited by the natural protection arising from the enhanced price of foreign articles; the extraordinary appreciation of rural and city real estate in the greater portion of the Republic, and, in general, the rapid multiplication of the country's wealth, are the arguments adduced by those who advocate the retention of the present monetary legislation. A reason put forth, as being decisive against all plans of monetary reform, is that the country has never been so prosperous and so well off as when the depreciation of the white metal was most pronounced. This observation, based indeed on facts which leave no doubt as to the prosperous condition of the Republic during the past decade, has given rise to a belief which has prevailed in Mexico until within recent times, that high rates of exchange are beneficial to the country. "Though it may seem paradoxical (thus to this day argue some advocates of the status quo) the fact is that the period of the country's greatest prosperity has been precisely that during which the price of silver was lowest."

A rapid, albeit serene and rational examination of the facts, will suffice to show the value of the conclusions which it has been sought to deduce from them.

A high rate of exchange doubtless constitutes a powerful incentive to the exporter of native products as well as to the manufacturer, who, if he is to compete on advantageous terms and control the interior market, stands in need of an enhancement in the price of the foreign articles similar to his own line of production. But the incentive in question is far from having produced all the results expected from it.

Agricultural products have been diversely affected according to the nature of the several crops. No one can question that the production of fibers, particularly heniquen, has received a vigorous impetus and that that impetus is due largely to the rise in the rate of exchange. The same may be said of certain cereals, such as beans and chick pease, and of dried fruits, as well as of untanned skins, though extra-

neous causes have also influenced the upward movement. With regard to stock raising, it is difficult to determine the amount of influence due to the depreciation of silver in the development of the industry, for it has been shown that fortuitous conditions in certain foreign markets did much to aid our stock raisers, and certain other branches of agriculture of some importance have been similarly situated. Finally, coffee, tobacco, vanilla, and a number of articles which are exported on a small scale do not seem to have been benefited to a marked extent by the economical phenomenon under consideration.

Among mineral products, of which the exportation has increased, silver itself, whose vicissitudes give rise to so many discussions, occupies a foremost place, and yet it can not be said that the prosperity of silver mines is due to a curtailment in the value of the output. In regard to gold, lead, and copper, which are the other metals produced in Mexico in considerable quantities, it is evident that, if the rise in exchange influenced their extraction, that influence can not have been very great, for as concerns gold there are few mines which are worked exclusively on account of the value which that metal has attained in relation to silver, and as concerns lead and copper, it is well known that the bulk of the production is due chiefly to the treatment of the precious metals by the smelting process and the exploitation of extensive argentiferous deposits, in which the value of the copper or the lead is a factor of relatively small importance. In fine, the expansion of the mining industry, though facilitated by the rise in exchange, can not be attributed principally thereto, but rather to different causes, foremost among which assuredly are the construction of railways in entirely new regions, the cheapening of transportation rates, and modern methods of ore treatment.

In all other lines of export products, whether they be raw materials or manufastured articles, the depreciation of silver has not had very perceptible effects, as is proved by the relatively small volume of the production of those articles, when considered in connection with the time that has elapsed since the depreciation of silver became accentuated. The statistical tables prepared by the monetary commission, which met at this capital, and by the bureaus of this department, as to the value in gold of the exports during the twenty fiscal years from 1881 to 1901, are conclusive on this point.

In the ten years from 1881–82 to 1890–91, during which the depreciation was slight and the fluctuation in the gold value of our dollar was relatively inconsiderable, seeing that the coin in question ranged in value between 0.89 and 0.84 of the American dollar, our total exports rose from $26,000,000 to $53,000,000 gold, or in other words, they doubled in value, whereas in the next ten years, from 1891–92 to 1900–1901, during which the value of our dollar fell from 0.84 to 0.48 of the gold dollar, after touching prices even lower than the latter, the gold value of our exports, which in 1891–92 was $63,000,000, arose only to $77,000,000 in 1900–1901, the increase being barely from 20 to 22 per cent.

It may readily be understood that to get nearer to the truth it would be necessary to take other circumstances into consideration, especially the variations that have taken place in the gold prices of our exportable articles during the periods in question, but even so, if it be considered that it is in these latter years, during which our exports have evinced the slowest progressive rate of growth, that

the price of heniquen has scored its highest rise—heniquen, the chief nonmineral article that we send abroad—it is necessary to admit that the depreciation of the currency can not have exercised a very decisive influence in the encouragement of export industries.

The same may be said of native articles consumed in the interior of the Republic, in regard to which the lack of statistical data and reliable information precludes the possibility of determining, with a near approach to certainty, the share due to the rise in exchange in the development of our industries, for which reason all arguments based on data and figures not entitled to thorough confidence should be eliminated from the discussion, so that the sole argument to which weight must be attached will continue to be the factor of which mention has been made, viz., the theoretical argument based on the protection afforded by high rates of exchange to home industries.

Principal Causes of the Present Prosperity.

The influence of the high rates of exchange on the development of some of our chief elements of wealth being thus reduced to its true proportions, it becomes proper to say a few words in regard to the state of positive and solid prosperity enjoyed not only by the industries to which allusion has just been made but also by all the national activities. The coincidence of this prosperity with the vicissitudes which the value of the Mexican dollar has undergone does not in the least prove that there exists an exclusive and determinate relation of cause and effect between them, for, without denying that such relation may have existed between the two phenomena in question to some extent, it is also true that other important factors have been at work, some of them purely casual and others due to the Government's action.

The influence of the former is not confined to the higher scale of exchange and prices, but includes climatogical conditions, rendering possible the harvesting of good crops for many years in succession, beginning in 1895. In regard to the second group of factors, all who have gone at all deeply into the study of our economical situation are well aware that the chief influences that have brought about the nation's present condition of prosperity are the absolute safeguards which peace has thrown around life and property; the creation of numerous, rapid, convenient, and cheap routes of communication; and finally the complete suppression of fiscal trammels to the circulation of merchandise in the interior of the Republic.

Influence of the Suppression of the Alcabalas.

Much is continually said about the benefits of peace and the creation of railways and other means of communication; but in investigating the causes of our prosperity sufficient prominence has not been given to the immense economic transformation wrought by the abolition of the very ancient system of "alcabalas" which had been the source of all the trammels and obstacles that could be devised by the States of the Federation, or even by the municipalities thereof, in their efforts to exclude from local consumption, or to saddle with a crushing load of taxes all native products coming from other points of the Republic. Some considerations based on figures, and designed to demonstrate the importance, as a factor of our prosperity, of the con-

stitutional reform which extinguished the "alcabalas," will not be superfluous.

The ordinary revenue of the Federal exchequer for the year 1893–94, which was the last year of the severe crisis through which the country then passed, amounted to $40,211,000 and the gains secured in the next two years, viz., $3,700,000 and $6,500,000, respectively, were due principally to one of those favorable reactions which generally occur on a vigorous scale after acute and prolonged periods of crisis as well as to the exceptional volume of the added burden of fiscal taxes in most lines of revenue decreed for the purpose of accomplishing budgetary equilibrium.

The influence of the former of the causes mentioned on the improvement in revenue in 1894–95 and 1895–96 is proved by the yield of the import duties which, by reason of the rise in exchange, ought logically to have shrunk, and which, nevertheless, exceeded those of the last year of the crisis by several millions of dollars, notwithstanding the fact that the modifications of the tariff were of no scant importance.

In regard to new taxes it was natural that they should yield abundantly in view of the vigor with which the work of rehabilitating our finances was undertaken at that time. In the budget bill for the fiscal year 1894–95, in which the various enactments having new taxes in view were enumerated, the annual yield of said taxes was estimated at $5,675,000. It may, therefore, be unhesitatingly affirmed that, up to the year 1896, the depreciation of silver, which had suddenly commenced three years previously, had not as yet produced perceptible advantages and that the marked improvement which began to be observable in the volume of the revenue was due to causes that were extraneous to said phenomenon.

In the middle of the year 1896 the constitutional amendment abolishing the interior custom-houses was promulgated, and when the new taxes, which replaced the "portazgo" schedules, were made operative in all parts of the Republic, many sources of revenue, as was natural, were affected, though not on such a scale as might have been apprehended when one considers the profound perturbation which a change in financial legislation so far-reaching and so sweeping was calculated to occasion throughout the country. But, beginning with the year 1897–98, the Federal revenue resumed its upward course until attaining in 1902–1903 the sum of $76,000,000, thus showing an increase of $24,000,000 in five years, a result that was not aided, as was the case in the period preceding the suppression of the "alcabalas," by any increase of existing taxes or creation of new ones. So far was this noteworthy expansion of Federal revenue from being due to new sacrifices on the part of the taxpayers, so much is it to be ascribed to other causes that shortly after the amendment had been made operative some taxes were diminished and others were repealed, until fiscal burdens became less than they had been prior to their augmentation. Does not the coincidence of a vigorous expansiveness in the Federal revenue with the new régime of liberty, created by the constitutional amendment of 1896, speak for itself? Could any comparison of figures and dates be more eloquent in demonstrating the influence of the amendment in question as an important factor in our growing rosperity?

Whether, however, the advantages which certain branches of native

industry have derived from the rise in foreign exchange be great or small, there is no doubt as to their reality, and all that has hitherto been stated does not tend to the denial of those advantages or to the minimization of their results, but merely aims at combating the propensity that has prevailed in our country to exaggerate the influence of the factor in question.

Drawbacks of the High Rates of Exchange.

It is time now to consider briefly the other aspect of the question.

In the first place, the temporary character of the stimulus to native production is obvious. In point of fact the enhancement of the prices of foreign articles encourages not only the production of similar native articles, but also of those articles that might be called succedaneous, and thereafter gradually extends to all other articles which apparently have nothing in common with the first named. The reason of this phenomenon lies in the fact that, inasmuch as all native producers are also consumers, the enhancement in the price of certain articles of general consumption naturally entails successive augmentations in the cost of production of other articles by virtue of a species of contagion. The upward movement, which begins with articles that are directly influenced by the rise in exchange, spreads imperceptibly through all the ramifications of national production, until finally the prices of commodities and services settle at a higher level which is proportionate to the depreciation of the currency.

This has occurred in Mexico since the sudden rise in foreign exchange, and the enhancement that began at that time in the prices of commodities and of personal service has only developed exceptions where influences of a special character predominate—as, for example, in the case of very active interior competition, or in cases wherein, through the introduction of machinery or the opening up of new routes of communication, products have been cheapened; and, in the matter of wages, such an exception is observable in those sections of the country where labor is abundant, for then the law of supply and demand exercises, as happens in regard to all transactions, an influence which frequently proves more powerful than the contrary influence of a depreciated currency.

The propitious results of a high scale of exchange are, therefore, purely transient, being due to the unequal conditions in which currency depreciation suddenly places native products in comparison with similar foreign products to the advantage of the former. When, therefore, cost prices rise to the level of the barrier created by the enhancement of exchange rates, the protection afforded by that barrier naturally disappears, and with it the chief advantages that have been enjoyed.

The production of silver itself has not been able to escape the operation of this phenomenon, though, owing to the facilities that have always been afforded in our country for the conversion of the white metal into coined dollars, it might have been supposed that the depreciation of the metal in question would not affect it. It is an ascertained fact that the enhancement in the price of imported articles and of similar or succedaneous native articles, as well as in the salaries of the higher foreign employees engaged in the operation of mines, curtails the profits of silver-producing mining concerns, and that this

curtailment is proportional to the volume of such expenses as compared with those that are totally independent of the value of silver abroad. Now, expenses of the latter class, which some years ago were the more considerable, are continually dwindling, owing to the progressive and transcendent influence of the depreciation of silver on all phases of national activity; and of late the increase in freight rates on ore, and above all, the increased tariffs of the metallurgical establishments for the treatment of ore, both of which facts are natural consequences of the phenomena which we have been discussing, have at last deprived the white metal of the chief advantages that still belonged to it by reason of the relation between its cost of production and its selling price.

Nevertheless this drawback is not the most serious one, for a benefit, however short its duration, is still a benefit. The most serious argument against high exchange rates is the direct and for long irremediable harm which a high scale of prices causes to a considerable portion of the population. Such is the testimony that might be borne by thousands of inhabitants, who have not found in the enhanced prices of the commodities which they sell or of the services which they render a suitable compensation for their extra outlay for the things which they consume.

The poorer classes in those regions of the country where there is no great demand for labor, clerks and employees earning a fixed salary and not possessing brilliant qualifications, persons producing articles which are already plentiful, those who can not work, and in general all who have a fixed income, are thus affected, and certainly they constitute a numerous section of the community entitled to every consideration. They are not to be forgotten amidst the chorus of praise which some extremists still intone in honor of a high level of exchange rates.

Pernicious Effects of the Fluctuations of Exchange.

Whatever opinion may be held as to the balance resulting from the compensation between benefits and evils occasioned by the depreciation of our currency, the fact remains that a new economic situation has come into being in which interests, perturbed for years, have finally adjusted themselves to the new value of our monetary standard. Moreover, many other interests of recent creation have been added to the old ones, thus augmenting considerably the national assets. Let us not, therefore, look back with longing to the times when the Mexican dollar was worth more than 5 francs and even more than an American dollar; rather let us resign ourselves to the great depreciation which it has undergone, and content ourselves with inquiring as to the new value with which it behooves us to invest it for the sake of the general interests of the Republic.

The delicate features of the situation, that which involves most difficulties and dangers, is not the depreciation of our currency in itself, but the constant fluctuations in the price of the white metal which are reflected in the rates of exchange.

The element of uncertainty in calculations can suit no one. It strikes at the basis of all forms of commerce and industry and converts business transactions into hazardous speculations. All are agreed as to the evils and dangers of oscillating exchange rates; those

who desire the depreciation of the currency fear that silver may recover its quotations of former times, and those who lament the shrinkage of the white metal can not welcome gains that are destined to prove ephemeral.

This is precisely the reason why, as has been seen, all the producers of exportable articles have not reaped the benefits which might have been expected to accrue to them through the rise in exchange. This is also the reason why, after all these years during which we have been enjoying a natural protection that has doubled the price of almost everything, only a portion, perhaps, it is true, the greater portion, of our industries have progressed.

More than enough time has elapsed since silver dropped to one half of its former value for men of enterprise and capitalists to have endeavored to reap the fullest possible fruit from the new economic situation and yet they have not done it, save on a relatively moderate scale, owing to the uncertainty as to the continuance of the margin of prices affording protection to national industries. For this reason prosperity has come only to undertakings requiring a modest amount of capital; to those which, being susceptible of establishment in a short period of time, engage in a line of production for which the market is extensive and safeguarded by inveterate usage; to those which have been specially protected by the Government, and to those which have been initiated by persons who have had faith in our future and whose hopes as to the continuance of high rates of exchange have been realized.

Are we to remain indefinitely in this situation and not seek to do away with the constant menace involved in the oscillations of exchange? Assuredly not. Whether the depreciation of silver is good or evil in itself, it is not that feature that need concern us so much as the uncertainty of the value of our instrument of exchange in terms of the gold currency of the nations with which we trade. There is, therefore, no room for vacillation as to the fundamental problem which we are called on to solve, and the sole point to which we have to direct our endeavors is that the means employed to accomplish the desideratum of stability of exchange shall be at once efficacious and expose the country as little as possible to unnecessary expenses and grave upheavals of vested interests.

Necessity and Means for Stabilizing the Gold Value of Our Currency.

Stability in the value of the currency would assuredly be attained in a simple and thorough fashion by the adoption of the gold standard, that is to say, by the free coinage of that metal and by depriving coins of any other metal of unlimited legal-tender capacity; but the reasons why we can not have recourse in Mexico to that radical solution are well known. The excessive expense that would be entailed by the substitution of gold coins, or coins convertible into gold, for the silver dollar; the obvious expediency of retaining in circulation the coin which the people have been accustomed to regard as the monetary unit for centuries past; the severe perturbation that would be incidental to the demonetization of the white metal, of which the production constitutes one of the chief sources of national wealth; and various other reasons equally cogent militate against an absolute

change of standard brusquely effected without regard for momentous interests and time-honored traditions.

The only method that can be adopted to bring about stability in foreign exchange is the one pointed out by the official commissioners who have studied the question and by numerous publicists, viz., the adoption of the gold standard with silver coins in circulation, reserving the use of gold coins also for a later date. By this course several million kilograms of silver bearing the Mexican mint stamp will be kept in circulation, larger quantities of the same metal will be used later on for new coinage purposes, and the disappointments, opposition, and conflicts to which a complete change of currencies would give rise will be obviated.

Now there are only two ways for bringing about fixity in the value of silver coins as measured by gold, without having recourse to universal bimetallism, which, aside from the fact that it is not a very sure system, is at present absolutely impracticable. Those two ways are either the artificial maintenance of the reciprocal relation of the price of the two precious metals in the world's chief markets or the limitation of the volume of coin in the Republic to the quantity strictly necessary for the requirements of circulation, thus emancipating the value of that coin from the value of the metal of which it is composed.

To regulate the prices of substances which, like silver and gold, are produced in abundance in various parts of the world, and for which there is an universal demand, would be an impracticable undertaking especially since the disruption of the agreement, existing de facto among almost all the chief powers, to coin unrestrictedly unlimited legal-tender money from both metals. At one time, it is true, there was some talk of curtailing the output of silver in order to increase the demand; but Mexico would have been the last country to countenance such an idea, for the reason, among others, that she is the largest producer of silver and that the winning of that metal from her soil is intimately bound up with the winning of other metals which constitute a source of great wealth to the nation.

Certain negotiations conducted last year by the Commission on International Exchange, which the Government sent to Europe, must not be confused with the project just alluded to. It may be parenthetically observed that among other instructions given to that Commission, which are already known to the public, was one that enjoined upon its members to confer with the representatives of certain foreign governments as to ways and means for lessening the fluctuations of silver due to governmental acts and to endeavor to bring about the suppression of certain trammels which hinder a larger consumption of that metal. With this end in view stress was laid on the manifest injury sustained, both by silver-standard countries and other countries trading with them, by reason of the continued oscillations in exchange occasioned by untimely purchases of bar silver by the chief governments of the world—purchases that can be easily regulated when their purpose is to meet the normal requirements of monetary circulation. Moreover, the Commission conducted an active propaganda in behalf of silver, on the one hand removing the prejudices, antipathies, and errors that prevailed in regard to the production and use of that metal, and, on the other, indirectly encouraging its con-

sumption through the endeavor to open up new markets and to abolish certain fiscal restrictions.

Unfortunately, our efforts, though fruitful in certain respects, have not, as far as the points just alluded to are concerned, been attended with any other appreciable effect than that of toning up to some extent the bar silver market and ushering in an era less somber for the white metal than the very critical circumstances through which it was passing when the Government took the first steps toward international consideration of the question.

It is therefore necessary to adopt resolutely the second of the courses mentioned, with a view to achieving stability in international exchange—viz., to impart to our monetary unit a value based not on silver but on gold. This is the course recommended alike by the principles of science and the teachings of experience, and it offers, moreover, the immense advantage of being controllable by the public powers.

In order to impart to coins a value which shall be independent of the value of the metal composing them, it is indispensable to appreciate them, and no other ways are known of doing this than either to make them convertible, at the pleasure of the holder, for other coins of greater value, or to bring about, through relative scarcity of supply, a demand such as will lead those who need coin to submit to greater sacrifices than before in order to procure it.

The reasons why we can not yet have a silver coin convertible at any moment into gold coin have already been stated, and therefore the solution is to be sought in the appreciation of the silver coin by means that will be attended with the minimum of detriment to vested rights and interests, as well as to future transactions.

For this object, the first step to be taken in the path of monetary reform is the adoption of the principle whereby just that amount of coin which is necessary to realize the desired result, and no more, is to be struck. This principle is opposed to that which hitherto has been the fundamental rule of our whole system of legislation in regard to the coinage of the precious metals, which was that the Government undertook to convert into coin all the gold and silver offered by holders thereof at the various establishments provided for the mintage of money.

Since the sudden disruption of the immemorial ratio of value that had existed between the two metals, unlimited coinage could only be explicable in countries where the gold standard exists in all its plenitude and in countries which retain the silver standard; but in no manner is it explicable in countries that desire to have a monetary system based on both metals. If, in order to secure stability of foreign exchange, we are constrained to part with the silver standard, there is no objection that can be urged against the repeal of the system of free coinage or against the adoption, as the immutable basis of our future monetary régime, of the principle that coinage must be subordinated to the demand arising from the activity of the internal and external transactions of the Republic.

Few measures have been or will be so much discussed and controverted as the suppression of the right of having silver converted into coined dollars. There are two equally important causes for these objections. One is the loss and trouble which the reform might occa-

sion directly to mining men, who would have to look elsewhere than to the mints for a customer for their silver, and the other is the real losses that would accrue to many through the disappearance of the profit arising from the difference in value between the silver coin and the metal contained in it.

Objections of Silver Producers.

Deferring examination into the former kind of losses to which allusion has just been made, it is most desirable to take up the latter, for their consideration is the consideration of the weightiest objections which have been made to the projected reform, and, therefore, when they are once disposed of, it will be extremely easy to answer other objections.

The disassociation between the value of our silver coins and the value of bar silver will entail loss to those who derive advantage from the identification of the two. And who are the persons who will suffer this loss? They are the owners of silver-producing mines and persons who look for advantages, even if only temporary, from new and still more pronounced depreciation of our currency. In regard to these latter little need be said, for, as has been shown elsewhere, the benefits of a depreciated currency must, by their very nature, be of short duration and can not continue indefinitely, for it would be absurd to suppose that greater and still greater advantages can accrue to a community in proportion as the instrument of its payments dwindles in value.

In regard to the owners of silver mines, there can be no doubt that the appreciation of our silver coins, as compared with silver, will cause them loss. The reason is very simple, for instead of being able to obtain, as they have been hitherto, as many dollars as can be coined from the silver bars which they win from their mines, they will have to sell those bars in the open market for a smaller quantity of dollars. Perhaps, latter on, owing to an advance in the price of the white metal, the loss to silver producers may give place to a gain, but whatever may be the future of the metal in question, the fact remains that when our coins are invested with a higher value than their intrinsic value, those producers will suffer. It is, therefore, not to be wondered at that they have striven so vigorously to preserve the privileged position in which our monetary legislation has placed them, and thanks to which they have been shielded from the hurtful effects of the oscillations in exchange.

A Condition that is Detrimental to the Interests of the Majority is not to be Maintained.

Under the new order of things to which we are aspiring, the producers of silver will be placed on the same footing, as regards the currency, as the producers of any other substance or commodity. The white metal will then, as far as its estimation in coin is concerned, be subject to the same fate as all other articles and all services. Both theory and practice prove that the prices of commodities fall or rise, respectively, when the value of the currency rises or falls. The single exception that has existed and still exists in our country is the white metal whose value has been identified with that of our currency,

and in truth there is no argument of expediency that can justify this anomaly.

One can understand how, at a certain period of our history, the opinion should have prevailed that mining deserved to be favored in every possible way, not only by franchises and facilities, but by differentiating the economic condition of mine owners from that of all other members of the community. But at the present time, however important the silver-mining industry may still be, the old-fashioned ideas on this subject are untenable. It is well that the mining fraternity should enjoy all the economic circumstances that are to its advantage, and no objection would be raised to its continuing to be protected by monetary legislation against the risks and drawbacks incidental to oscillations in exchange, were it not that that protection is hurtful to all the other interests of the community with which the interests of the mining fraternity are not only not identical but openly antagonistic, for a condition, which to the mining class is an incentive and a guaranty, is to others fraught with uncertainty and loss, and what constitutes a privilege in favor of the producers of a given article is a stumbling block to the rest of the country's inhabitants. Is this equitable? The answer is obvious. If fixity in the value of the currency is the desideratum of the community, and if that fixity can not be attained as long as the value of the currency is dependent on the price of the white metal, there is no consideration that ought to influence the Government to maintain a condition that is detrimental to the interests of the great majority of the nation's inhabitants.

THE CESSATION OF IDENTITY IN VALUE BETWEEN THE CURRENCY AND BAR SILVER WILL NOT BE SO HURTFUL TO MINING INTERESTS AS IS THOUGHT.

Moreover, if we examine carefully the relations existing between the production of silver and foreign exchange, we must arrive at this conclusion: That the stabilization of exchange, even though accomplished at the expense of the identity in value that has always existed between our currency and silver bullion, will not be as hurtful to the to the exploitation of silver mines as might at first sight be supposed.

In the first place, the labors of the monetary commission have demonstrated that not all mining concerns will suffer to the same extent through the suspension of coinage, but that in many cases the loss will be so slight as not to affect the fortunes of the concerns in question at all. It has also been proved that an enhancement in the prices of certain articles which are indispensable to mining; the increase in freight rates which so largely affect the price of ore; and, finally, the advance in salaries and wages which, if not yet very marked in some mining districts, has in others reached a very high percentage and which before long will become general in proportion as labor grows scarce, will in the end cause silver mining to forfeit the greater part of the advantages which it enjoys.

In corroboration of this view the experience of mining concerns situated in the States along the northern border may be cited. The persons interested in those concerns, accustomed as they are to pay salaries and wages and the cost of almost everything that they need in a silver price, which is the equivalent of the gold price of the same commodities and services in American territory, are, among mine

owners, those who raise fewest objections to the project of stabilizing exchange, and it may even be said, without exaggeration, that in general they are in favor of that project.

It is true that the foregoing considerations refer principally to the effects of the rise in exchange, whereas the privileged situation of the mining man is due to unrestricted coinage; but the continual oscillations in exchange influence to such an extent the prices of all commodities that, however great may be the advantages which the mine owner reaps by being able to have his silver converted into dollars, the day is bound to come when those advantages will be eclipsed by the benefits which he will derive from stability in the value of the national currency.

A pertinent reflection, which may be made in order to determine the real scope of the effects that will flow from the suspension of free coinage, is supplied by the situation in which the mining industry has periodically been placed in recent years. It is a well-known fact that during the first six months of each year payments, which for any reason have to be made abroad, are effected wholly by means of drafts, and that metallic money is not brought into requisition in any way, whereas in the months from July to December it becomes necessary, in order to complete those payments, to ship coined dollars. This phenomenon is due to the fact that, inasmuch as our exportations are larger in the first part of the year, there is a more plentiful offer of drafts made out against them. The difference between the price that is paid for a draft and the cost of the exportation of an equivalent amount of coined dollars is sometimes as high as 8 per cent, and it creates, as far as the vendors and exporters of silver are concerned, a situation analogous to that which will result from the suspension of coinage.

A recent and very striking example of this situation is afforded by the exchange market during the ten months that have elapsed of the present year, for not only did the rates of foreign exchange deviate from the price of bar silver during the customary period, which, as has been said, is from January to June, but the condition in question has endured to date, thanks to the abundance of drafts on the market due to the exceptional influx of capital, an influx which, under proper direction, has kept the rate of exchange for several months past in the neighborhood of 215 on New York, when parity, on the basis of silver values, has ranged from 217 to 235.

It is true that not all the silver mined in the country is subject to the loss in question, but only that which can not forthwith be coined; but that loss, which as has been seen is wont to be somewhat heavy, affects more than three-fourths of the output of the white metal, consisting of the exports thereof in the form of ore, sulphides, cyanides, impure bars, pigs of argentiferous lead, copper mattes, etc. The owners of bars which come up to the standard exacted by the mints alone escape the effects occasioned by the divergence between the rates of exchange and the price of bar silver.

The situation of the mining interest will not, therefore, change greatly for the worse when a passing condition, which has recurred for years past during the months when there is an abundant supply of drafts on foreign points, becomes permanent and common to all the months of the year. The drawback in the case of those who already feel it will probably be intensified, but its effects are already

known, and therefore capable of being gauged and combated. In any event it is not too much to say that the loss arising from the appreciation of the currency will not be as great as some persons claim and certainly not irremediable.

EXAGGERATIONS IN THE PICTURE DRAWN BY THE PARTISANS OF UNRESTRICTED COINAGE—COMPENSATIONS THAT WILL COME TO THE MINE OWNERS THROUGH THE CHANGE IN SYSTEM.

It must be owned that the picture painted by the partisans of free coinage, in order to emphasize the mischievous effects of the reform under consideration, is exaggerated. One-half of the mining concerns in the country ruined; hundreds of thousands of people reduced to want; the consumption of agricultural and manufactured products curtailed; a contraction in the volume of commercial transactions and railway traffics, and many other calamities are the features of that picture. Those who thus argue do not assuredly reflect that, if it is true as said, that a great number of mining concerns operate at a loss, their closing down, far from being a misfortune, will in reality be an advantage, obviating an useless employment of capital and energy. Nor do they reflect that if it should become impossible to keep up work in certain mines there will not be lacking others producing different metals, which will either begin to be exploited or will be exploited on a larger scale than at present, owing to the influx of capital attracted by stability of exchange; or that, if unfortunately employment becomes scarce in certain mining districts, the mine hands will be able to emigrate to other districts as the same class has frequently done before in our mining annals; or that, in fine, some of the losses that will be sustained by our silver-mining industry are susceptible of being completely remedied or at least of being mitigated by means of sundry compensations which eventually may more than counterbalance the damage suffered.

Moreover, it is unquestioned that the real losses which the curtailment of the value of silver, as compared with the value of our currency, may occasion, will only be felt in proportion as that curtailment of value becomes accentuated. In consequence, if those losses seem likely to prove irremediable in the case of some concerns, they will not come about all at once. This will enable the natural operation of other factors which have largely contributed to the development of mining to continue their beneficent work and to arrest in time the disastrous consequences which in theory might be expected. Much is yet to be expected from the extension of railways and the multiplication of metallurgical establishments tending to allay the fear that our production of silver will suffer an alarming contraction, especially seeing that the public powers will assuredly be disposed to encourage that production in other ways, enabling it to retain the high position which it has achieved among the nation's industries.

PLANS FOR THE REDUCTION OF TAXES ON MINING.

In this connection this department has given particular attention to the taxes which directly or indirectly weigh on the production of silver in order to single out those which, owing either to their magnitude or nature, may lend themselves to modifications favorable to the

mining interest. A revision of this nature became imperative as soon as the Government's opinion began to lean toward the discontinuance of free coinage, for, in addition to reasons of equity which recommend the affording of compensations when losses and difficulties are occasioned, there is the cogent argument that when the economic privilege which has so powerfully aided the mining industry shall have disappeared, the reasons of justice existing for a portion of the taxes borne by that industry will also disappear.

In comparing Federal and local taxes on mining with those on other forms of national production, one is struck by the difference in character between them. It may be said, as a general proposition, that mining contributes on a less scale than any other branch of the national wealth to the local revenue of the States and that, per contra, it supplies to the Federal exchequer a larger sum than almost any other industry. The truth is that the 2 per cent which the States are empowered to collect by the present law as the total amount of their local taxes on the yield of mines producing the precious metals is obviously less than the tax which they collect on real estate, commerce, and industries in general. But the same observation can not be made in regard to the taxes payable to the federation, which are of a special character and which aim at remunerating given public services, as is the case in regard to the dues for assay, melting, separation, refining, and mintage, or at marking the recognition due for the benefits which the nation extends to its favorite industry, as, for example, the tax on mining claims and the so-called 3 per cent stamp tax on the extraction of silver and gold.

The Executive would be glad, in point of tax reduction, to go to the lengths advocated by some honorable members of the monetary commission, for if, as a general rule, it seizes all opportunities for reducing fiscal burdens, there are in the present case specially powerful reasons for such a course. However, it will not be possible on this occasion to accede to those wishes to the fullest extent, owing to the magnitude of the resources which the taxes in question contribute toward the annual expenses of the federation, and it will be necessary to maintain, though on a lesser scale, those taxes which represent the price of certain direct services enumerated in one of the foregoing paragraphs or compensation for the right to exploit mines, for the granting of franchises for the erection of metallurgical establishments, and for the facilities which mine owners will continue to enjoy, some of which are of considerable magnitude, as, for example, the free importation of certain articles.

Other Drawbacks Which the Restriction of Coinage Might Occasion.

A few words may be said in regard to other kinds of drawbacks which may supervene upon the suspension of coinage. These other drawbacks do not involve the shrinkage in value which the white metal will undergo when estimated in our currency but the loss of the facilities which the present régime affords to the owners of silver bars in enabling them to receive the value thereof within three days after the presentation of the bars at the mints. Notice has already been taken of the fact that the owners of silver bars are differently situated as compared with the producers of other forms of the same metal, and this difference is emphasized if one considers the facility with which

the former obtain, at once and almost without loss, the price of their commodity, for, according to monetary laws and the regulations of the mints, the bars need only to possess certain qualifications in order to be forthwith accepted for coinage.

Now, in the régime which is proposed, the situation of the owners of silver bars will hardly undergo variation, and in reality the mining community will, in the long run, be rather benefited than the reverse. It would be a source of satisfaction if all the difficulties arising from the monetary reform were as easily remediable as the one just mentioned. By providing arrangements according to which, when bars are not minted into dollars for direct exportation or into subsidiary coins, funds will be advanced to the owners of bars and the same will be sold for them on the best possible terms, the problem will have been solved, and this Department is pleased to announce that preparations have been made and arrangements consummated which, when the time comes, will enable this object to be accomplished at the minimum of expense to those concerned.

THE REIMPORTATION OF DOLLARS MUST BE PROHIBITED.

Inasmuch as the expediency of imparting to our currency a fixed value in relation to gold has been recognized in principle and it has been demonstrated that that fixity can not be attained while the free coinage of silver, which prevents the appreciation of said currency, is maintained, a natural consequence of those premises is that, in addition to restricting coinage, the reimportation of dollar pieces, which constitute our monetary unit, must be prohibited. It is impossible, in effect, to conceive of a currency being invested with a higher value than its intrinsic value as long as the coinage thereof depends exclusively on the pleasure of persons owning silver bars; but it is equally impossible to conceive of that result being brought about unless the reimportation of dollars, which circulate in profusion abroad, particularly in the countries of the Far East, is prevented.

It might be objected that this latter course, or, in other words, the rejection by a nation of its own coin when said coin has once left the territory of that nation, is not quite proper; but this view; which as a general proposition seems reasonable, is not applicable to our special case, altogether aside from the weighty considerations which amply justify the course in question.

It may be stated at once, with entire truth, that the coined dollars which are shipped to the United States and Europe are not remitted as money (as are the specie shipments made by other nations for the settlement of their trade balances), but are exported as merchandise pure and simple, subject like other merchandise, as far as their price is concerned, to the demand existing therefor. Mexico exports dollars in the same way as she exports silver bullion or any other commodity for which there is a market abroad, whereas other nations only export specie in order to liquidate their bills in various markets. It is no argument to say that the Mexican dollar circulates as currency in certain portions of Asia, for it is not legal tender there nor can the fact in question plead any international sanction in its behalf. If our dollar circulates in those countries, it is because their inhabitants are accustomed to its design and know that the coins which bear it contain a given quantity of silver. They care for no other

aspect of the case and certainly never give a thought to the legal value of the coin in the country of its origin.

On the other hand, if the appreciation of the dollar over the silver which it contains is to be the fruit of the efforts and sacrifices of the Mexican nation, it would be by no means just that the profit involved in that operation should be enjoyed by persons in foreign countries who have accepted the dollar merely for its intrinsic value, without ever entertaining the remotest intention of utilizing it as currency in dealings with Mexico.

Thus no one will be injured by the prohibition to reimport Mexican dollars, and in order that the country may not become liable to even a shadow of reproach in this respect, a period of time may be allowed within which persons desiring to reimport dollars may do so.

Expediency of Retaining the Fineness and Design of the Present Dollar.

It seems timely to say here a few words on the advisability, while effecting the reform, of retaining the monetary unit which has been in use to this date, viz., the silver dollar weighing 27.073 grams and having a fineness of 0.9027.

This Department does not propose to discuss the arguments offered by publicists in favor of the reduction of the quantity of silver contained in the Mexican dollar, for those arguments are outweighed by the urgency of respecting the traditional custom of the inhabitants of this country, causing them to accept as the basis of their transactions the old coin of 10 "dineros" 20 grains, which, with almost inappreciable differences, is the same as continues to be coined to this day. Great as might be the advantages obtained through a diminution of the degree of fineness or the metallic contents of the dollar piece, they assuredly would afford no compensation for the immense perturbations that would arise from the suspicion with which the public would regard a coin of lessened intrinsic value. In giving up the profit that would be derived from coining a dollar of lower intrinsic value than its legal value, and in foregoing an advantage more important still, viz., that such diminution in value would render still more remote the probability that the intrinsic value of the dollar might some day, through an advance in the price of silver bullion, exceed its legal value, the Government will hold its sacrifice light, if thereby it is possible to ward off the dangers and troubles that would be occasioned by the disfavor with which the public would receive a dollar of less weight and fineness than the old one.

This desire to give no cause for alarm or distrust has moved the Executive to propose the retention of the present Mexican dollar not only with the same quantity of silver as it now has, but with the same design and subject to the same methods of mintage, at least for some time to come until the consequences of the new system can be observed.

Indeed, a change in the design of the dollar, without any change in its fineness or its weight, could only be explained by the desire to prevent frauds which might be committed through the reimportation, in spite of the legal prohibition, of dollars circulating abroad. Now this precaution would be costly and useless—costly, because it would involve the recoinage of all the dollars held by the inhabitants of the Republic and useless for the reasons which may be briefly explained:

There is a fact which, however deficient may be the explanations

offered in regard to it, has all the force of an incontrovertible truth, and that fact is the constant absorption of silver, and particularly of Mexican dollars, by the countries of eastern Asia. The white metal that penetrates those regions never comes forth again; it might be lost, or annihilated or transformed, for all the trace which it leaves behind it. The current which carries silver along to a final destiny which is unknown, but which exists in some form, is too strong to permit of apprehension that any considerable portion of our dollars will turn back and penetrate anew, in the form of contraband, into Mexican territory.

Again, what incentive is there for such contraband operations? The sole inducement would be the premium which the coined dollar would enjoy in Mexico over the commercial value of its silver contents. From this premium it would be necessary to deduct the freight rates from the markets of the Far East, commissions, minor expenses, and the very heavy disbursements that are always incidental to any dangerous enterprise, such as the passing of contraband goods which are difficult to hide, when also the penalties are severe.

In case the views of the Executive in regard to the gold value with which our dollar is to be invested are accepted, the appreciation of that dollar over the price of bar silver will not, even assuming a heavy decline in the latter metal, exceed 20 per cent, and therefore it is quite certain that, for the sake of a profit relatively so inconsiderable no one will venture to run the gauntlet of the laws which are to prohibit the reimportation of dollars, any more than counterfeiters have ventured to imitate the coins of those countries in which silver circulates as unlimited or almost unlimited legal tender, though this operation would be attended with a profit three, four, five, and even more times as great. There is no doubt that an explicit and severe body of laws will afford an insurmountable barrier to any attempt at fraud. It must also be borne in mind, as a further reason for dismissing all fears of the clandestine reimportation of dollars, that, owing to the innate suspicion of oriental races, by whom our dollars are used, the bankers circulating them have been accustomed for centuries past to stamp them with a special mark and, according to information received from banking establishments in the Far East, almost all the Mexican dollars in circulation bear this stamp, and therefore they could not be reintroduced into this country without revealing their contraband character and without also enlisting our own people in the prevention of their importation through their refusal to receive disfigured coins debarred from legal circulation.

'HE VALUE OF THE CURRENCY IS TO BE ENHANCED WITHIN PRUDENT LIMITS.

Up to what point is it desirable that the value in gold of the Mexican dollar should be made to rise? Or, in other words, what is the equivalent in grams of fine gold at which the present silver dollar is to be valued in order best to conciliate the manifold national interests? This question calls for explanations, as does also another question of mere procedure which is intimately bound up with the former, and that other question is the following: Ought an endeavor to be made to attain the new legal parity rapidly, or ought its attainment to be accomplished in a more or less lengthy period, through the action of time and the gradual development of public wealth?

An appreciation of the currency is indispensable, as has been seen, in order to disassociate its value from the value of the metal composing it; but this enhancement in value is susceptible, in proportion to its magnitude, of causing evils of a different kind. In the first place, the inverse ratio effect which it produces on the prices of all commodities brings up the serious problem of protection to native industries. A contraction of the currency, or, what is the same, a decline in foreign exchange, constitutes a menace to those native industries which can only thrive on a high scale of prices for the products of consumption; and the export industries and most of the manufacturing industries are thus situated. Care must, therefore, be taken not to exaggerate the gold value of our currency, owing to the fatal effect which such a course would have on numerous sources of wealth. Other arguments against a marked enhancement of the currency may be derived from considerations based on the relations between debtor and creditor, as well as on the inconvenience that would be occasioned in the case of long-time transactions already concerted.

On the other hand, if the margin between the intrinsic value of the currency and its exchange value is made too narrow, there exists the danger that, during one of the many spells of fluctuation to which the silver market is exposed, the value of the metal might go above the legal parity of the coined dollar, occasioning an economic perturbation of which the intensity would be proportionate to the lack of efficacy and timeliness in the measures employed to restore monetary equilibrium.

Immediate Determination of the Legal Parity.

Before determining the ratio with gold which is to be the goal of our silver currency, this department deliberated as to whether preference was to be given to the system recommended by some economists and men of affairs and which has been adopted by some nations, as, for example, England in the Straits Settlements, the system, namely, that consists in gradually enhancing the value of the currency without determining beforehand the parity which it is desired to attain. The arguments that are adducible for this method seem of no small weight, appealing as they do to the safety afforded by the possibility of observing events as they succeed one another and of arriving with certainty at the ratio that is most adaptable to the economic conditions of the country; but if it be considered that that ratio between a silver currency and gold, varying as it does from day to day, according to the operation of the factors influencing it, is not accompanied by clear and unmistakable signs to indicate when the end of the journey, as distinguished from a temporary halting point, has been reached, it will be realized that there is much that is illusory in the advantages of this method of arriving at a definite parity.

The Government has made up its mind in favor of the opposite system, for it believes that the advantages that attend the immediate determination of the value to which it is to be sought to raise the dollar outweigh the disadvantages of that course. It is also proper to state that its decision in this respect has been powerfully influenced by the special reasons that militate in favor of the ratio chosen, as well as by the particularly propitious fact that the ratio in question is the one that has been singled out by public opinion with equal persistence and generality.

Parity Recommended for the Present Silver Dollar.

The parity proposed for the present silver dollar is that of 75 centigrams of fine gold, a parity equal to that of the Japanese yen and which has the advantage of making our dollar equal (the difference being very slight) to the American half-dollar, which has been its average value since 1893. If during the last two years its value has been at times considerably less, the difference is not so great that, even on the hypothesis of the low quotations being maintained, it will offer any difficulty to the attainment of the new legal parity by the simple methods which the government purposes to employ to that end.

The parity in question represents a ratio of 32.5855 to 1, which is the ratio existing between the 24.4391 grams of pure silver which the dollar contains and the 0.75 centigrams of fine gold which will constitute the new unit of our monetary system. At one time the idea was to accept as a unit the exact half of the American dollar, but inasmuch as it can not be expressed in the decimal system in few figures and the difference only consists in a small fraction of a centigram of gold, it was decided to forego exact equivalence in order to secure the advantages, for purposes of calculation, afforded by the adoption of the figure of 0.75 or three-fourths of a gram.

For months past the exchange value of our dollar on New York has been 46 cents to 47 cents gold, in spite of the fact that the price of silver in bars has been relatively lower. As, however, the tendency of the white metal does not afford any prospect of considerable improvement (for neither is production likely to be curtailed nor the demand suddenly to increase to any great extent) it would seem, as far as foresight can go in these difficult and obscure problems, that the margin between the commercial value of the metal contained in the dollar and the gold value which it is intended to give to our monetary unit, is sufficiently broad to dispel any fear, at any rate for some time to come, of the serious inconvenience that would be occasioned by the rise in the price of silver above legal parity, and yet is not so broad as to inspire doubt as to the ability of the silver dollar to attain parity with gold without serious difficulty.

Finally the parity of 75 centigrams of fine gold per dollar will give an exchange rate on New York of 200 per cent approximately, and it is undoubted that exchange even thus reduced will still afford sufficient protection to the industries which have grown up under the stimulus of the decline in silver. To reduce that exchange rate further would be dangerous; thus the legal ratio chosen by the Government may be considered as the golden mean amidst the many conflicting interests involved in this question. And certainly it must be gratifying to the partisans of monetary reform that in this respect, viz., the rate of exchange which conciliates the interests of the greatest number, almost all the opponents of the reform are at one with them.

No Effort is to be Made to Bring About Legal Parity all at Once.

There remains to be considered the question whether it is desirable to endeavor to bring about the legal parity all at once. In order to solve this question, it is necessary to realize as nearly as possible how the various factors that will come into play in the new economic situation of the country will operate.

When the mints shall have been closed to the free coinage of silver and the importation of Mexican dollars shall have been prohibited, the quantity of the circulating medium, or, in other words, the total of tokens of exchange, within the national territory will be limited to the stock on hand when those measures become operative. Now, according to a principle which seems to be well established, there is a relation or proportion, though it is almost impossible to state it arithmetically, between the number of tokens of exchange or the quantity of coin in circulation and the number and volume of transactions that have to be effected therewith, so that if the latter increase and the former remains stationary the currency is enhanced.

In accordance with this principle, and inasmuch as the uninterrupted progress of the Republic is an undeniable fact, the prospect is that that progress will not be arrested, but that the volume of transactions and business will continue to increase, necessitating a greater quantity of coin, on which account the latter will appreciate until attaining legal parity with gold, but will not go beyond, for when once the limit in question is reached the yellow metal will be offered to the Government in exchange for silver coins, which will then be struck to augment the circulation.

Statistics prove that between 1882–83 and 1901–2 the country retained in metallic money—that is to say, in Mexican silver dollars—an annual sum of five millions thereof, approximately, representing the indispensable supply to meet the increased requirements of circulation, and this in spite of the fact that during the period in question the use of bank notes, checks, and other instrumentalities of credit, previously almost unknown, have come into general use in our midst, contributing greatly to stimulate the functions of the currency. Is it not, therefore, permissible to hope that in future currency requirements will continue to increase at least in the same proportion? Everything warrants an affirmative answer, and that the development of public wealth, new facilities for communication, and many other circumstances will add to those requirements on a progressive scale. And in proportion as there is a greater demand for currency, that currency will appreciate in gold value if its volume remains stationary, as will be the case when coinage ceases to be free. There will be, in the case of this, as of all other social phenomena, factors operating in a contrary direction, as, for example a still further possible increase in the amount of fiduciary circulation which performs the functions of metallic money and a more common use of the instruments of credit and banking methods, obviating the use of coin and augmenting the mobility of circulation, but there will also be favoring factors not the least of which will be the daily increasing output of gold. And in this way the appreciation of the currency must inevitably in the long run take place, for it will be governed by the law of supply and demand, one of the most solidly established and most universal principles in the domain of political economy.

The foregoing considerations seem sufficient to demonstrate that legal parity will come about of its own accord through the gradual operation of entirely natural causes, of which the action must not be precipitated, especially in view of the fact that any other course would involve the risk of provoking any day, and perhaps simultaneously, a decline in prices and a rise in the rate of interest which

would occasion a crisis and would suddenly paralyze the efforts of the producing classes, instead of allowing time, the further development of public wealth and the opening up of new sources of activity and labor hitherto unknown, to supply them with the means of adapting themselves to the new conditions which, to the advantage of the entire nation, will be solidly founded on the stability of international exchange. It has also been stated elsewhere how dangerous it is to alter by any legislative act the relations between debtors and creditors into which they have voluntarily entered, and if on the top of a modification in the value of the instrument of exchanges there were to come the imposition of a brief period within which that modification would have to be effected, leaving no time for the prices of all commodities to adjust themselves to the new legal parity, it must be admitted that, however wise and safe might be the provisions of the law, the sacred rights of one of the contracting parties would be violated to a greater extent than the public welfare seems inevitably to demand.

The Expediency of Creating a Gold Fund to Attain and Preserve Stability in the Rate of Exchange is Examined.

There has been considerable difference of opinion among the members of the monetary commission and business men in the Republic and abroad in regard to the proposal that the Government should at once create a gold fund for the purpose of exercising a decisive influence on the market in the achievement of stability in our exchange rates or of maintaining that stability when once achieved.

The Executive was, in consequence, bound to give, as it has in effect given, special consideration to this point, and only after a most careful study has it decided, for the present at least, in the negative. The principal reasons for that decision may be set forth:

Without entering into an examination of the proposal according to which the fund in question would be used, openly and without limitation, to furnish gold, or gold drafts on foreign points, in exchange for silver coins at the legal parity, to persons desiring to make payments outside of the Republic (a proposal that would be equivalent to introducing the gold standard in a complicated way that could in no manner be recommended), it is necessary to take into consideration the magnitude of the sacrifice that would be imposed on the nation in order to procure the amount of gold that would be necessary to exert an efficacious influence on the rate of exchange. The means to which it would be inevitably necessary to have recourse in order to procure the gold in question would be a loan, and the sum that would have to be borrowed, according to the most optimistic opinions, would not be less than $40,000,000. It is true that the credit of the nation has improved to a gratifying extent, and that, therefore, neither would the operation be impracticable nor would the sacrifice represented by the interests on the loan be more than the exchequer could afford. But it must not be forgotten that one ought only to have recourse to measures of this nature when they are absolutely necessary, and above all when the benefits which they entail are so undeniable that they evidently outweigh the objections, and on many and substantial grounds it may seriously be doubted whether this condition would be realized in the present instance.

In point of fact, what do the advocates of the gold fund hope to accomplish through its creation? Primarily to bring about legal parity either at once or very soon; and this, as has been shown elsewhere in this exposition, far from being a desideratum, would give rise to a rather dangerous situation.

Moreover, though, in the case of problems so complex and obscure, it may not be wise to trust to the efficacy of a single principle nor to cling thereto with obstinacy, we may not disregard the laws of ratiocination and we should be disregarding them if, while announcing that the fundamental principle of the reform consists in subjecting the currency to the effects of relative contraction, we were to show that we did not feel adequately confident that that contraction would produce its natural consequence—that is to say, that it would enhance the gold valuation of our silver money. There is, in fact, all the greater reason for expecting this result in that, in spite of exceptionally adverse circumstances, it has been achieved in other countries, which, without serious upheavals, notwithstanding all that may have been said to the contrary, accomplished, some time ago, the object which we now seek to attain.

The economic progress of the Republic is so perceptible; the material conditions of its inhabitants are improving so rapidly and unmistakably; foreign capital evinces such eagerness to find in our territory a more remunerative employment than in other countries, that, without erring on the side of optimism or empty presumptuousness, it is permissible to trust that when coinage shall have been suspended, the necessity of an increase of the circulating medium will begin to be felt, and that necessity will of itself cause gold to flow into the Republic, for only in exchange for gold will new silver dollars be coined and the currency augmented.

Some other persons who argue in favor of the reserve fund do not regard it as intended to inure to the attainment of legal parity but to the maintenance of that parity when attained, within the narrow limits of fluctuation to which foreign exchange is subject even in gold-standard countries.

The question being thus stated, it becomes necessary to consider two classes of phenomena which are susceptible of causing grave perturbations in the exchange market. If the disturbing cause were to belong to the domain of politics, domestic or international, it seems at least doubtful whether the existence of a gold fund would suffice to prevent the collapse of exchange rates, for the calamities that are inherent to disturbances of this nature absorb money in such quantities and with such urgency that the reserve fund could hardly continue to be devoted exclusively to banking purposes. In regard to crises of an economical nature, which may also occasion severe variations in the rates of exchange, it is undoubted that they do not produce such violent and protracted upheavals of the market as the other cause, nor are they of a nature to baffle the foresight of the banks and business men, who can almost always ward them off or mitigate them by efficacious means based on the principles which govern international commerce.

No doubt situations will occur in which a gold reserve would render great services, and undoubtedly the most advantageous use that could be made of such a reserve would be its immediate effect on the market in checking any brusque movement that might occur in the direction

of a rise in exchange rates. But if the free action of the measures that are proposed for the purpose of enhancing the value of the monetary circulation and bringing about a higher price for the national currency, should prove inefficacious to neutralize the upward movement of exchange rates and to restore legal parity, then the time would have come for the great banking institutions, for private firms and business concerns of all kinds, to solicit gold loans abroad, against which they would draw with all the greater confidence in that, as the disturbing factor of the market would not be of long duration, the reaction would in due course set in, enabling them to refund the amounts drawn for on profitable terms.

The Government might also, if necessary for the same purpose, make use of its credit or of the gold funds which it frequently has at its disposal.

Such, stated as briefly as possible, are the reasons which have influenced the resolve of the Executive not for the present to create a reserve fund. But this does not imply any purpose on its part not to have recourse to that method of maintaining monetary parity if circumstances clearly demonstrate its necessity. Still less does it indicate the intention of using for the needs of the exchequer the profits that may in future be derived from the coinage of silver in exchange for gold at the legal parity, for in this respect the Executive is fully alive to the risk of imparing public confidence that would be run by converting what will, in a certain sense, be a deposit intrusted to its care, into a source of revenue. If the expectations of this exposition are realized, the profits in question which according to the contemplated plan will not be held and handled exclusively by fiscal agents or employees, will constitute a reserve fund which in time will come to be of considerable volume, and then the legislature will decide as to the best manner of using and increasing it.

Subsidiary Coinage and the Mintage of Dollars Intended for Exportation.

Coming down to points of less importance than those above treated, this department has considered that a radical reform of our monetary system afforded a suitable occasion for ridding it of certain imperfections which are attended with drawbacks of some moment to the country. Contrary to sound economic principles and the practice of all civilized nations, our subsidiary coins are unlimited legal tender and are of the same fineness as the Mexican dollar, occasioning not only excessive expenses for coinage, but also giving rise to the inconvenient condition under which, while some portions of the country are afflicted with a plethora of small change, causing it to be at a discount, other portions suffer from a scarcity of token currency for payment of wages and other small transactions, and have to offer a premium to procure it. It is time that such anomalies should end, that the subsidiary coins now in circulation be withdrawn, and that new coins be issued subject to rules that will in future obviate the drawbacks with which the present ones are attended, while also preventing the lesser fineness of the subsidary coinage from being converted some day or other into a source of fiscal revenue, to the detriment of the estimation of that species of currency and hence to the detriment of public wealth.

Again, as it is probable that the oriental nations will not, at any rate for some time to come, abandon their inveterate custom of using the Mexican dollar, even though only in the nature of small bars of silver of uniform and recognized fineness, it seems expedient to maintain the Government's power to coin said dollar exclusively for exportation at times when the condition of foreign markets allows some profit to be derived from this operation.

FINAL CONSIDERATIONS.

It may seem strange that in an affair of such importance as is the subject-matter of this exposition, and which has been so carefully studied, this department should not, in conclusion, submit to the National Legislature one or more bills looking to the immediate reform of our monetary system, but should content itself with asking Congress to authorize the Executive to issue the laws in question, subject to the terms of the accompanying project.

In adopting this form of procedure the President of the Republic has been influenced by the consideration that the reform can not be put in practice save after the realization of numerous enactments and measures of an administrative nature, and that it is desirable to wait for a moment when the conditions of the silver market shall not be particularly adverse, in order just then to decree the reform in question. And inasmuch as said measures could not be taken until Congress had been pleased to approve the projected reform, at any rate in so far as its fundamental principles are concerned, and as it would be anomalous to defer the execution of laws, after their actual issue, until a favorable conjunction of circumstances should occur, the Executive had no other course open to it than to solicit from the Federal Chambers a new proof of the confidence which they have hitherto reposed in it, and which it has always endeavored to use for the welfare of the nation.

In conclusion, the Executive hopes that if the monetary reform is carried out along the lines set forth success will crown the efforts of the nation to implant it and this without vitally affecting the great interests represented by the mining industry and the other industries involved in this change, and also without shock to the silver market, seeing that no new factors influencing the price of bar silver will be brought into play, as Mexico will be in a position, by means of her coinage for exportation and mintage of subsidiary currency, to use a quantity of silver nearly equal to that which in said forms she has circulated and consumed year after year for long past.

Be pleased to report to the Chamber, of which you are the worthy secretaries, the accompanying bill and to accept for yourselves the assurances of my courteous consideration.

J. Y. LIMANTOUR.

To the Secretaries of the Chamber of Deputies of the Federal Congress, Present.

MEXICO, *November 16, 1904.*

THE BILL.

ARTICLE 1. The Executive of the Union is empowered to amend the monetary laws of the Republic, determining the kinds of coin that shall have legal circulation; the value, weight, fineness, and other characteristics of said coins; their margin, or "remedy," both as to mintage and circulation, and, in general, laying down such provisions as said Executive may deem necessary to perfect the monetary system and adapt it to the economic necessities of the Republic.

In the exercise of these powers the Executive will conform to the following rules:

A. The present silver dollar, containing 24.4391 grams of pure silver and 2.6342 grams of copper, will be retained and will be unlimited legal tender.

B. There will be ascribed to this silver dollar a value equivalent to 75 centigrams of pure gold.

C. The subsidiary silver coins will contain a smaller quantity of that metal than that which, proportionally speaking, they ought to have on the basis of their token value in terms of the peso [dollar].

D. These subsidiary coins will not be legal tender for more than twenty dollars in one and the same payment nor will the bronze coins be legal tender for more than one dollar in a single payment; but the Government will designate offices where private persons may freely secure hard dollars in exchange for subsidiary silver coins or bronze coins which they may present in amounts of one hundred dollars or multiples thereof.

E. The mints will not be obliged to coin the precious metals presented to them, but the issuance of coined money of all kinds will be reserved for the Executive, so that said Executive may exercise this power in accordance with the laws, and on such occasions and in such quantities as they may prescribe.

ART. 2. The Executive of the Union is also authorized to adopt the following measures:

A. To prohibit the importation of Mexican silver dollars into the territory of the Republic.

B. To demonetize coins which it considers desirable to withdraw from circulation.

C. To coin for exportation dollars of designs antedating the present one.

D. To alter, if found desirable, the design of the present silver dollar.

E. To permit the legal circulation, for a limited period, of the gold coins of other nations, at the same time fixing their value in Mexican coin, in case the standard ounce of silver in London goes above 28½d.

F. To modify the fiscal laws in regard to mining, lightening the aggregate burdens which are borne by the precious metals in the shape of the 2 per cent coinage tax, the 3 per cent stamp tax, and the dues for assay, melting, refining, and separation.

G. To modify the laws which authorize the collection of a tax of $10 per claim on the title deeds of mines and also the annual tax on mining claims, so as to favor mines producing the precious metals.

H. To modify the law of June 6, 1887, so as to reduce to 1½ per cent the maximum of 2 per cent, which, according to the law in question, is the present limit of local taxes on the value of the precious metals.

I. To remove or reduce existing import duties on articles destined for use in mining.

J. To organize offices, which, without loss to the public exchequer, will advance money on the value of silver bars and afford to holders thereof facilities for the sale of said bars on the best possible terms, and, with this end in view, to make suitable contracts in the Republic and abroad.

K. To modify civil and mercantile legislation in all matters connected with prestations and payments in money.

L. To modify the precepts of the banking law which have direct or indirect connection with metallic currency or which affect the instruments of credit or transactions in exchange.

LL. To appoint a committee whose functions shall be to regulate the monetary circulation and to accomplish, as far as possible, stability in the rate of foreign exchange and to this end the Executive may clothe the said committee with such powers as it sees fit and may also intrust to it the manipulation of a special fund, the amount of which will be fixed by the Executive.

M. To issue all suitable enactments, including such as aim at the repression and chastisement of misdemeanors and offenses connected with the subject-matter of this law; to organize services and establish offices that may be necessary and to defray the expenses needed for any of the purposes hereinbefore set forth; to which end the Executive may suppress or modify the present distribution of offices, their personnel, and the appropriations and disbursements authorized by special laws or by the budget of expenditure.

J. Y. LIMANTOUR.

MEXICO, *November 16, 1904.*

Appendix E.

THE STRAITS SETTLEMENTS.

A GOLD STANDARD FOR THE STRAITS SETTLEMENTS.

By Dr. E. W. Kemmerer, Chief of Division of the Currency, Treasury of the Philippine Islands.

The decade from 1870 to 1880 was noteworthy in monetary history for the extensive substitution throughout the western world of a gold-standard currency for the previously dominant bimetallic standard. The ten years beginning with the closing of the Indian mints in 1893 will in like manner be noteworthy for the extensive substitution in the eastern world of the gold standard for the silver standard, which had theretofore existed throughout almost the entire Orient from time immemorial.

Among the most recent of oriental countries to undertake the adoption of a gold-standard currency is the Straits Settlements. This British colony, composed of Singapore, Penang, Malacca, and their dependencies, is one of the great entrepôts of the shipping trade of the Orient. Like most eastern countries it has had a varied monetary experience.[a] The tin "pice," the various kinds of silver rupees, the Dutch rix dollar, the Japanese copang, the Carolus dollar of Spain, the Mexican and British dollars and their kindred South American coins, as well as sterling coins and money coined by the Straits Settlements themselves, have all had at one time or another a wide circulation in the Malay Peninsula. From early in the sixteenth century until the present time, however, in spite of several attempts to displace it,[b] the principal medium of exchange and the real money of account of the Straits Settlements has been the old Spanish dollar or some of its illustrious descendants like the Mexican and British dollar.

In 1867, the year of the transfer of the Straits Settlements from the control of the Indian government to that of the secretary of state for the colonies, an ordinance was passed repealing all laws making Indian coins legal tender and declaring that after April 1 of that year "the dollar issued from Her Majesty's mint at Hongkong, the silver dollar of Spain, Mexico, Peru, and Bolivia, and any other silver dollar to be specified from time to time by the governor in council, shall be the only legal tender," with the exception of certain

[a] An excellent brief historical treatment of the Straits Settlements currency will be found in Chalmers's Colonial Currency, chap. 38.
[b] Ibid.

subsidiary coins.[a] Since 1871 subsidiary coins for the Straits Settlements have been struck by the royal mint. An order in council, dated October 21, 1890, repealed all previous laws with reference to legal tender in the colony and declared the Mexican dollar the standard of value, at the same time giving unlimited legal tender to the Japanese yen, the Hongkong dollar and half dollar, and the American trade dollar. Prior to the passage of the currency law of 1903 two subsequent orders in council of importance relative to the currency were passed, under dates of February 2, 1895, and October 20, 1898. These orders taken together removed the legal-tender quality from the American trade dollar and the Japanese yen, reaffirmed the law making the Mexican dollar the standard coin, and declared that the Hongkong dollar and the recently coined British dollar should be legal tender and be treated as equal to the standard dollar. The Straits currency thus established was, with a slight modification, adopted by the Federated Malay States.

About the beginning of the calendar year 1903 the actual currency of the Straits Settlements, the Federated Malay States, and Johore was roughly estimated as follows:[b]

(1) About 30 million British and Mexican dollars, of which by far the larger part was British dollars, and of which nearly a third represented coin held in reserve against the government's note issue.

(2) Nearly 7 million dollars of Straits Settlements subsidiary coins, of which it was officially estimated that something like $300,000 had been shipped out of the country.

(3) An unknown amount of copper coins, the remainder of a total coinage since 1871 officially stated at $1,887,500 (nominal), of which large quantities had been shipped out of the country.

(4) About 13 million dollars of government notes.

The effect of the fall in the gold price of silver was similar in the Straits Settlements to what it was in India, Mexico, and the other silver-standard countries of the world which had extensive trade relations with gold-standard countries. The evils resulting to local business from the rapidly falling and fluctuating exchange with gold-standard countries finally became so serious in 1893, after the closing of the Indian mints and the calling of the extra session of the Congress of the United States to consider the repeal of the Sherman law, that the British colonial secretary telegraphed to the governor of the Straits Settlements for a report as to possible remedial measures in the direction of securing for the colony greater stability of exchange. In response to this telegram a special committee was appointed by the governor to investigate local monetary conditions and to suggest remedial measures. The committee examined a considerable number of witnesses, whom they considered "fair representatives of the thinking men of the colony of all classes," and found that, with the exception of the majority of the Chinese traders, the witnesses examined were "mostly in accord in declaring that the fall in exchange has been disadvantageous to these Settlements." In spite of this fact, however, the committee was unable to agree upon any proposition favoring the introduction of the gold standard, and their report was divided.

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[a] Report of the Straits Settlements Currency Committee, London, May, 1903, pp. 4 and 5.

[b] Ibid., pp. 5 and 6.

Half of the twelve members of the committee favored a gold standard, five of them advocating the introduction of the rupee upon the plan which had at that time but recently been adopted by India, provided, however, that that plan should prove a success in India. The other half of the committee, including all the native members, favored a continuation of the silver standard.[a]

From 1893 to 1897 there was considerable agitation and newspaper discussion in the Straits Settlements concerning the advisability of adopting a gold standard, but nothing came of it until 1897, when, on August 25, the committee of the Singapore Chamber of Commerce by a unanimous vote, adopted a resolution favoring the establishment of a fixed par of exchange with gold countries, and appointed a committee "to inquire into the local currency with the view of calling attention of government to the question of converting the Straits currency to a gold standard."

The essence of the recommendations of this subcommittee may be summed up as follows:[b]

(*a*) The adoption of the English sovereign as the basis of the new currency, "with a Straits dollar—fixed at the value of 2s.—subsidiary to it." The existing subsidiary silver coinage to continue unchanged except for being placed upon a gold basis.

(*b*) The government "not to let its intention be known, and, when a decision is arrived at, to pass a law at one sitting of the legislative council, and immediately thereafter issue a notification to the effect that during a term sufficiently brief to prevent importation all dollar coins then legally current in the colony would be received at certain specified places and government currency notes given in exchange; and that after the expiry of such terms the British, Mexican, and other dollars in circulation would be demonetized;" the Federated Malay States to promulgate the same law simultaneously.

(*c*) From the stock of silver obtained by the government from its exchange of notes for British and Mexican dollars a limited supply of the new two-shilling dollars to be coined, these dollars to contain an amount of silver of from 60 to 70 per cent of that contained in the British and Mexican dollars, the seigniorage to accrue to the gold reserve.

Nothing of any consequence in the way of monetary reform developed from the above plan. It was severely criticised by the governor, by the president-general of the Federated Malay States, and by many others in high position.[c] This criticism was based on the following grounds:

(1) The expense involved in maintaining such a token coin at a 2-shilling value and in exchanging the new dollar for the old one.

(2) The danger of counterfeiting, which in the Orient would be great in the case of coins like the ones proposed, whose nominal value was so far above their bullion value.

(3) The difficulty of the Government's keeping its intentions

[a] A copy of the report of this committee is given in Appendix XVI of the Minutes of Evidence and Appendices of the Straits Settlements Currency Committee, London, May, 1903.

[b] Ibid., Appendix XVII.

[c] Ibid., Appendix XXVIII, No. 12. See also Appendix No. 54 of the Index and Appendices to the Evidence Taken before the Committee Appointed to Enquire into the Indian Currency, London, 1889.

secret until the final passage of the law; and on the other hand, if the public were notified in advance, the danger of an inundation of British and Mexican dollars, to take advantage, either legally or illegally, of the 2-shilling dollar exchange offered.

(4) The difficulty of inducing the natives, who were accustomed to judge the value of a coin by its weight, to take at a higher value a coin of little more than half the weight they were accustomed to.

(5) The difficulty of inducing the native holders of the old dollars, especially those of the Federated Malay States, to exchange them for a paper currency with which they were not familiar.

As a result of these and other similar objections nothing came of the plan proposed.

The rejection of this plan gave a quietus to the subject of a gold standard for the Straits Settlements, as far as any official action was concerned, until the middle of 1902. On June 9, 1902, the Singapore Chamber of Commerce again addressed a letter to the colonial government asking whether—

"in view of the recent serious decline in the value of the dollar current here, the violent fluctuations in the price of silver and the extreme uncertainty as to the future of this metal, all of which are not only causing great inconvenience to the trade of the colony but constitute grave obstacles to the development of its natural resources by stopping the flow of capital from other parts of the world,"

the Government were prepared to investigate into "the feasibility and expediency of securing fixity of exchange."[a] This letter, together with certain subsequent communications upon the subject, was forwarded to the colonial secretary in July.

The result of these communications was that a committee composed of Sir David Barbour, Mr. W. Adamson, Mr. G. W. Johnson, and Mr. W. Blaine, were appointed by the secretary of state for the colonies to consider:[b]

"(1) The expediency or otherwise of introducing a gold standard of currency in the Straits Settlements and the neighboring Malay States.

"(2) The practicability of making the change and the steps which in the opinion of the committee should be taken to effect this object if the change should be decided upon."

The committee began its hearing in London, November 13, 1902, and continued taking testimony until about February 1, 1903. During that time a mass of testimony, both verbal and written, was taken. The committee's sittings having been in London, it was necessary that the greater part of the testimony should be that of English merchants having trade experience with the Straits Settlements or with the East generally—the class of persons, who, it will be noted, naturally would have been most favorable to the establishment of a gold standard. The masses of the population, represented by the natives and by the Chinese, who do a large part of the business of the Straits Settlements and of the Federated Malay States, could not be heard directly; while through petitions and resolutions they took comparatively little part in the controversy—in fact they were for the most part ignorant of the entire matter. On the whole the evidence seems to show that the weight of opinion among the more intelligent of

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[a] Report of the Straits Settlements Currency Committee, p. 7.

[b] Ibid., p. 3.

these classes was on the side of maintaining the status quo. The European community, with the exception of the bankers and of a few exporters, were almost a unit in favor of a gold standard.

A detailed discussion of the evidence brought forth in this testimony and published in the minutes of the committee's report is not necessary. The exhaustive discussion during the last decade or more of the effects of a fluctuating standard of value has made knowledge of the evils connected therewith general. The report of the local committee appointed in 1893 to consider the subject of the Straits currency declared that "all the effects remarked on in paragraphs 21–28 of the report of Lord Herschell's committee are in operation in the Straits." This statement was nearly as true in 1903 as in 1893. A few salient features of the conditions leading to the legislation of 1903 may, however, be briefly referred to.

The annual fluctuations in the gold value of the local money during the period 1891 to 1901 are shown in the following table:[a]

Rates for bank bills on London.

[Four months sight.]

Year.	Highest.		Lowest.		Average.	
	s.	*d.*	*s.*	*d.*	*s.*	*d.*
1891	3	6¼	3	1¾	3	3
1892	3	1¾	2	9¼	2	10¾
1893	2	9¾	2	4¼	2	7¾
1894	2	3½	2	¾	2	1¾
1895	2	3 1/16	1	11¼	2	1¼
1896	2	3	2	1	2	2¼
1897	2	1 13/16	1	9 9/16	1	11 13/16
1898	2		1	10 3/16	1	11 5/16
1899	2	5/16	1	11¾	1	11 13/16
1900	2	2 3/16	1	11¼	2	¼
1901	2	1¾	1	9½	1	11 15/16

The Straits Settlements were not, like India, practically forced to the establishment of a fixed par of exchange by the existence of a large public debt payable in gold. The Straits government itself had no public debt, while the small debt of the Federated Malay States was a local interstate debt, payable in the local silver currency. Both governments, however, regularly had large sterling obligations to meet in the purchase of supplies, while the salaries of all the higher officials of the Straits government were on a sterling basis.[b] Inasmuch as these charges remained relatively fixed regardless of the fluctuations in the value of the local dollar, while the gold value of the revenue received tended to fall rapidly with the fall of exchange, the government found itself handicapped in meeting its obligations.

The relative importance of the Straits Settlements' trade during the period from 1891 to 1901, with gold and silver countries respectively, may be seen from the following figures representing imports and exports of merchandise inclusive of intersettlement trade and exclusive of treasure.[c]

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[a] Minutes of Evidence and Appendixes of the Straits Settlements Currency Committee, p. 143.

[b] Vide Colonial Office List, 1903, pp. 309–311, and August Huttenbach, The Silver Standard and the Straits Currency Question, Singapore, 1903, pp. 9 and 10.

[c] Minutes of Evidence and Appendixes of the Straits Settlements Committee, pp. 130 and 131.

Trade with silver-standard countries.

[Values expressed in millions.]

Year.	Exports.	Imports.	Total exports and imports.
1891	$45,579	$83,937	$129,516
1892	48,140	93,946	142,086
1893	44,992	83,891	128,883
1894	53,771	94,068	147,839
1895	55,434	96,877	152,311
1896	57,079	96,260	153,339
1897	57,299	98,769	156,068
1898	64,747	98,615	163,362
1899	68,710	121,945	190,655
1900	76,294	135,402	211,696
1901	79,965	142,033	221,998

Trade with gold-standard countries.

[Values expressed in millions.]

Year.	Exports.	Imports.	Total exports and imports.
1891	$68,910	$44,895	$113,805
1892	74,693	43,436	118,129
1893	89,538	68,547	157,085
1894	104,971	88,613	193,862
1895	105,394	88,468	193,862
1896	104,698	89,936	203,634
1897	114,878	99,591	214,469
1898	129,394	124,387	253,781
1899	157,145	133,346	290,491
1900	174,621	154,994	329,615
1901	176,808	150,776	327,584

While the figures show a healthy growth of trade in general, it is noteworthy that the greater proportion of the foreign trade at the close of the period was with gold-standard countries, that the trade with those countries was a rapidly growing one, that its growth was more than commensurate with that with the silver-standard countries, and that despite the severe handicap given to the import trade with gold-standard countries by a falling exchange, the reported imports from those countries had been for some time larger than those from silver-standard countries, while the growth of the former had been much the more rapid. As would have been expected on a falling exchange, the exports to silver-standard countries lagged far behind those to gold-standard countries.

While it is doubtless true that most of the trade with gold-standard countries appears in the colonies' trade statistics and that a considerable part of what Mr. August Huttenbach calls the "Hinterland trade" with silver countries does not appear and that dollar-for dollar the trade with the silver-standard countries is somewhat more important to the colony than that with the gold-standard countries, it is none the less true that the Straits' foreign trade both actually and prospectively should logically have placed it among the gold-standard countries long before 1903.[a]

[a] Vide on this subject August Huttenbach, Memorandum on the Straits Settlements Currency Scheme, Penang, August 10, 1903, pp. 2-3.

One of the most serious disadvantages of the existing silver standard, the committee believed, was the discouragement to the investment of foreign capital in the colony, due to the apparent, and in many cases real, decline in the sterling value of capital invested in the colony.

These facts, together with the element of uncertainty and speculation brought into business by a fluctuating exchange, the feeling that exchange had fallen to the point beyond which a further fall would cease to be profitable to the export trade, and the movement on the part of neighboring countries toward a gold basis, forced the committee to the conclusion that the time was ripe for placing the Straits Settlements, the Federated Malay States, and Johore upon a gold standard.

Three principal methods of making the change to the gold standard were considered. The plan suggested by the Singapore chamber of commerce in 1897 was believed to be impracticable for the reasons already stated. The introduction of the Indian currency system, which was recommended by five members of the local currency committee in 1893, involving, as it did, a change in the unit of value from the dollar to the rupee, the adoption of a currency which would be largely controlled by another country, and whose bullion value was far below its face value, found comparatively few supporters in 1893, whatever might have been the merits of the plan ten years before.

The plan finally recommended by the unanimous vote of the committee may best be briefly stated in their own words:[a]

"A special Straits dollar of the same weight and fineness as the British dollar at present current in the East [to be gradually substituted] for the Mexican and British dollars, the latter dollars * * * [to be] demonetized as soon as the supply of the new dollars is sufficient to permit of this being done with safety. Under this plan it will be necessary for the Straits to obtain a considerable supply of the new dollars, and as soon as this is received the new dollars should be made full legal tender concurrently with the Mexican and British dollars, and steps should be taken to put them into circulation. The first supply of new dollars might be obtained * * * by remitting to one of the Indian mints a portion of the coin reserve of the currency commissioners to be melted down and converted into the new Straits dollars, and this process might be continued until practically the whole of the coin reserve is converted into new dollars * * *.

"Simultaneously with the arrival of the first supply of the new dollars and with the making of them legal tender, the import of Mexican and British dollars should be temporarily prohibited and the export of the new dollars should also be prohibited. As there is ordinarily a large import of Mexican and British dollars into the Straits and subsequent export of them, we think it likely that when their import is prohibited there would be a tendency toward a considerable drain of these coins from the Straits Settlements, and if the new dollars are freely supplied, the change of currency might be completed without any great delay.

[a] Report of the Straits Settlements Currency Committee, May, 1903, pp. 12 and 13.

"When the currency is so largely composed of the new dollars as to justify the measure, the Mexican and British dollars should be finally demonetized, and the Straits Settlements would then be in the position in which India was when the change of standard was undertaken in that country, with, however, the very important advantage that there would not be an enormous proportion of the new coins either hoarded or circulating in foreign countries, which might, by being thrown into circulation, indefinitely delay the establishment of the gold standard.

"After the Straits Settlements had arrived at this stage the procedure might be exactly the same as it was in the case of India, i. e., after sufficient Straits dollars had been coined to meet the requirements of business in the colony and the adjoining states the coinage of dollars would cease until the exchange value of the dollar had reached whatever value in relation to the sovereign might be decided on by the government as the future value of the Straits dollar. After this stage is reached the Straits government would issue the new dollars in exchange for gold and at the fixed rate.

"When the gold standard is established it would not be indispensable that any gold coins should be made legal tender in the colony and the states. But the government should be prepared not only to give in exchange for a sovereign such a number of dollars as are hereafter declared equivalent to a sovereign, but also to give sovereigns in exchange for dollars at the same rate so long as gold is available or to give bills on the Crown agents in London based on the fixed rate of exchange."

The committee expressed the opinion that it was "desirable that the standard of value and the currency of the Straits Settlements and the Federated Malay States should continue to be identical, and they hold the same opinion with regard to Johore."

The above recommendations of the currency committee were first published in Singapore on May 7, 1903, and were adopted in toto by the legislative council on May 29, and accordingly represent the law under which the new currency is established.

On September 25, 1903, an ordinance was passed authorizing the governor in council, subject to the approval of the secretary of state, to issue an order prohibiting the importing, circulating, or holding in one's possession of certain coins to be specified in the order, after a date fixed therein, under penalty of heavy fines and the forfeiture of the coins thus illegally used or held.

As soon as it became evident that the importation of Mexican and British dollars into the Straits Settlements was likely to be prohibited when the new Straits dollars began to arrive, sterling exchange rose in the Straits, as compared with neighboring countries, and a strong tide of Mexican and British dollars began to flow from Hongkong, the Philippines, China, French Indo-China, and other neighboring countries toward Singapore, in anticipation of the future prohibition of their importation and their redemption in the new dollars. The money market was so flooded with this money that considerable currency exportations were soon found profitable.

The new dollars began to arrive early in October, and the governor, pursuant to the authority given him in the ordinance of September 25, 1903, immediately upon the arrival of the first shipment of the

new coins, issued an order prohibiting the exportation from the colony of the Straits Settlements dollar and the further importation into the colony of Mexican or British dollars. The new dollars are being coined at the Bombay mint, and since October 1 nearly every boat coming to Singapore from Colombo is said to have brought several hundred thousand of the new dollars. The money received is being placed in circulation through the instrumentality of the treasury and the banks.

It is yet too early to pass judgment upon the success of the scheme adopted, and prophecies with reference to currency problems in the Orient are exceedingly dangerous. Moreover, the details of the methods to be adopted for maintaining the sterling parity when it once has been attained and for adjusting the currency supply to the demands of trade have not yet been made public. So far the Straits have simply begun to substitute one silver currency for another, and the colony will continue to be on a silver standard until the old local currency has been displaced by the new and the new currency has been raised to a fixed sterling equivalent yet to be decided upon. This process anywhere would be a slow one; in the Orient, where custom and prejudice are such dominant factors in all matters pertaining to the currency, it is likely to be especially slow.

The promptness and ease with which the change will be effected depend very largely upon the future course of silver and the sterling par of exchange which the Straits government finally adopts. It is generally believed that the par of exchange fixed will be 2 shillings. This is the rate that has been most persistently urged, a rate which would not materially alter the existing unit of account, or the more recently contracted long-time obligations, a rate in harmony with the units of neighboring countries, as for example, the Japanese yen, the Philippine peso, the French piastre, the Mexican and British dollars, and a rate easily assimilated to the currency of the home country. If silver should continue anywhere near its present price the silver content of the new dollar, moreover, would, at a two-shilling rate, be sufficiently large to offer little inducement to counterfeiting, and, on the other hand, sufficiently below the nominal value of the dollar to offer little probability of its being melted down for bullion.

If silver falls so that it shall become necessary to raise considerably the value of the new dollars in order to bring them to the sterling par decided upon, the time required to effect the change will be a long one, and the monetary stringency, which will be a condition sine qua non to raising their value, will be severe; while the additional burden placed upon that part of the debtor class who have long-time obligations contracted at times when the monetary unit was considerably below the par of exchange fixed upon, and payable in the new and higher-priced dollar, will be a heavy one, except in so far as it may be lightened by special legislation or by increased incomes (largely temporary) arising from the adoption of a monetary unit of account of a higher value. In these respects a low price of silver is likely to entail upon the Straits Settlements a repetition of the unfortunate experiences which India passed through during the period from 1893 to 1898.

During the time that the value of the new dollar is being raised above the value of the Mexican and British dollars, at a parity with

which it shall have been permitted for a considerable time to circulate, great care will be necessary to prevent the illicit importation of these coins, which would tend to displace the new dollars and prevent the realization of the currency scarcity necessary to raise the new dollar to the sterling par adopted. To prevent this contingency it seems quite probable that if the Mexican and British dollars are materially cheaper in the outside market than the sterling value fixed upon for the new Straits dollar, it will be found necessary to put into effect the measures penalizing the circulation of the old currency authorized in the ordinance of September 25, 1903.

If, on the other hand, the price of silver rises so that the market value of the old dollars is practically equal to the sterling value given to the new dollar, and if their value remains at this high point long enough to create a prejudice in favor of the new dollar and to establish in the business community the habit of using it, a subsequent fall in the value of the old money would leave the new dollar in possession of the field, and offer little inducement toward the illicit importation of the Mexican or British dollars. Under this contingency the penalizing of the circulation of the old money would probably be unnecessary.

MANILA, P. I., *March 1, 1904.*

APPENDIX F.

THE MONETARY SITUATION.

1. THE DISLOCATION OF THE EXCHANGES—ITS EFFECT ON GOLD AND SILVER COUNTRIES.

By Charles A. Conant, Treasurer of the Morton Trust Company, New York City.

The benefits of a single standard adapted to modern conditions were so keenly felt in the advanced commercial countries which adopted the gold basis after 1873 that the inconveniences which might attend the step were at first disregarded or obscured. The evils of the double standard—the uncertainty which it introduced into contracts and the disturbance which it had caused to the monetary system in so many countries—had proved so serious, and the advantages of the single standard in internal trade were so great and obvious that for a brief period it seemed as though there would hardly be a discordant note in the general chorus of satisfaction. The advantages of a single standard were in themselves considerable, apart from the question which metal was adopted.[a] It soon appeared, however, that several evils threatened to result from the rupture between the comparative steadiness of the relationship between gold and silver which had existed prior to the general adoption of the gold standard.

While the double standard had failed to maintain exact parity between gold and silver, it had tended to keep the metals much nearer together in value than was found to be possible when one of them ceased to be widely used as standard money. Silver was reduced to the rank of a commodity measured in value by gold, and subject, in the same manner as any other commodity, to fluctuations in supply and demand. There were two important ways in which this change operated to make unsteady the gold value of silver. The first was by closing certain countries against its introduction as legal tender money, and thereby directing any increase of supply entirely upon those countries which remained on the silver standard. The second was in separating the value of existing silver coins, in gold-standard countries, from the value of the bullion which they contained, and thereby removing from the market for silver bullion the steadying influence of the great stock of silver in use as money.

It was contended, with some force, by advocates of the double standard that so long as this standard prevailed in France and other important commercial countries the entire world was, in a sense, under the operation of the double standard. As Helm puts it, somewhat too strongly:[b]

"The joint standard was in fact up to 1873 the common standard of value throughout the civilized world, except where the circulation

[a] Fixity of value between the various components of the currency is so essential a requisite in any well-regulated monetary system that we need not be surprised to find special importance attached to it. (Pierson, I., p. 573.)

[b] The Joint Standard, p. 129.

consisted of inconvertible paper money. In some countries the legal-tender unit was of silver, in others of gold and silver, and in others of gold. Since, however, the relative values of the two metals were equalized by the action of the mint laws of the Latin Union there was no greater variation in the rates of exchange between any two of the three classes of countries than those which occurred, or might have occurred, between any two of the same class."

While the concluding statement is subject to some qualification, it involves an important principle. Even a country using only gold could not escape the leveling influence upon the ratio of exchange between the two metals, due to the fact that in bimetallic countries a market existed to which silver would be attracted if its price fell, while gold was released for use in the gold countries, and that on the other hand (as proved to be the case after the gold discoveries in California and Australia) a market for gold existed to which that metal, in its turn, would be attracted if it fell below silver in value at the legal ratio of coinage. Inevitably, under the operation of the law of supply and demand, wide markets for both metals, and the possibility of substituting one for the other as money, tended to keep the metals nearer together than if such markets were closed. Hence it would come that if there should be a relatively decreasing stock of gold the value of gold in relation to other things would not rise so rapidly if the bimetallic system lingered in important countries as if all countries were upon a gold basis. The demand for money in the bimetallic countries would fall upon the cheaper metal, and thereby diminish the pressure upon the dearer. England could not escape the operation of such an economic tendency in keeping down the relative value of gold when it tended to rise above silver, and a silver-standard country, like France, could not escape the operation of the same tendency in keeping up the value of silver by the opportunity afforded for its free conversion at its mints into coin. Hence it was natural that the two metals should remain more nearly of the same value while several powerful countries adhered to the bimetallic standard than after they had closed their mints to the free coinage of silver and employed the metal only in limited quantities for their subsidiary coinages.

Upon the market for silver bullion the closing of many mints to free coinage produced a marked effect. It was not merely that the market for bullion was narrowed, but that the old relations were severed between the existing stock of coin and the new bullion. When almost the entire volume of existing silver money came to be kept at par by government control, and the bullion contained in it remained continuously below par, the silver entering the market from time to time represented almost the entire visible stock. If the new supply of bullion was small, its price rose because it was not controlled by the great reserve fund of the metal in coin. If the new stock was large, its price fell because it found no check in the opportunity to offer the metal for free coinage at the mints. One of the great merits of the metals as money is the fact that the production of any one year forms but a small fraction of the existing stock. A great increase in production could not have any such influence as a great increase in the production of a perishable commodity like wheat, nor even a commodity which has entered into consumption, like copper. The great product of previous years remains, in the case of gold and silver, a permanent part of the stock on the market. The cost of

production, therefore, or the value of the product of a given year, is subject to the powerful steadying force of the whole stock.

This regulating influence of the existing stock ceased to operate when silver was no longer freely coined. Every day that the metal was offered in the London market it became the football of speculation, because the supply there offered was, in a sense, almost the entire visible supply, instead of a very small fraction of it, as under previous conditions.[a] The stock of those countries which remained on the silver standard—British India, Mexico, and China—remained nominally a part of the common stock in the market, but even this influence was felt feebly in the minor fluctuations of the price in London, because these countries were so largely under the domain of custom rather than competition.

The effects of this change in the market position of silver were intensified by changes in methods of production. After it became unprofitable to work the poorer silver mines in gold countries, because of the great fall in the gold price of silver, a large amount continued to be mined as a by-product of copper, lead, and zinc. This supply of silver, coming continuously upon the market, is was necessary to sell as rapidly as it was produced, since the large capital which would be required to hold it, and the almost continuous decline in its gold price, discouraged any project for withholding it for more favorable market conditions.[b]

The most obvious evil resulting from the fluctuations in the gold price of silver bullion which attracted the attention of the commercial world was "the dislocation of the exchanges," or the rupture of par of exchange between gold and silver countries. This means, in less technical language, that it became no longer possible to calculate with any certainty—or even within any definite limits, however wide—the degree to which the money of the silver countries would depart from its old relative value to the money of the gold countries. This was designated the rupture of the par of exchange, because operations between foreign countries are carried on through the foreign exchanges, and where the standard money is of the same metal the cost of conversion of one currency into the other represents only the delay and expense of shipment. The effect of this rupture of the par of exchange upon countries thus deprived of a common monetary standard was set forth by the British Gold and Silver Commission as early as 1888, before the fluctuations in the gold price of silver had attained anything like the range of later years. They said:[c]

"There is no common measure of value; the metal composing the standard in one country is little more than merchandise in the other; and many of the advantages of money as a means of facilitating trade are thus curtailed. This inconvenience is reduced to a minimum, or disappears altogether, if the value of the two metals is comparatively stable; but it is urged that if to the difference in standard

[a] This is shown by the fall from a maximum of 24⅛d. per ounce in September, 1902, to a minimum of 21 11-16d. in November, 1902.

[b] "As it is known that silver is being shipped with great regularity, and as the history of the last thirty years shows an almost continual fall in the price of silver, it has been a somewhat safe speculation to sell 'futures' at lower prices. This fact places the seller of 'futures' in a position to be interested in the constant fall of silver and to work for it."—Memorandum of the Mexican Commission on International Exchange, Stability of International Exchange, p. 194.

[c] S. Misc. Doc. 34, 50th Cong., 2d sess., p. 40.

is added the uncertainty of variations in the relative value of the two metals, a serious impediment to trade is established."

How serious is the influence of such conditions on trade was thus stated by General Walker in his discussion of the subject in 1896:[a]

"Such fluctuations in the relative values of the two money metals continually involve international trade in embarrassment and disturbances of a most serious character, and often reduce it to mere gambling. Without some tie which can hold the two metals at least near to each other during the time between the manufacture and sale of commodities and the receipt of the proceeds, the producer in a gold country can never tell for how much silver he must sell his goods in order to make himself whole and perhaps win a profit. The range of possible losses or possible gains from this source is such as to be altogether out of proportion to the range of ordinary chances of industrial and commercial enterprise."

As soon as the disturbing influence of the rupture of the par of exchange between the gold countries and the silver countries began to be felt, discussion began as to its ultimate results. The natural tendency of the new conditions was to increase the command of a given amount of gold over labor in a silver country. This would not have been the case if wages in silver countries had changed automatically with the fall in the value of silver, so as to remain constant in ratio to wages in gold countries. But under normal conditions, even if such adjustments occur ultimately, neither wages nor prices conform at once, even in advanced countries, to a change in the monetary standard. Still less has this been the case in the silver-using countries, where the principles of competition act much less efficiently than in the gold countries. This condition naturally led to the belief that a falling standard would permit slight reductions in gold prices sufficient to command foreign markets, and thus afford an opportunity to the silver countries for increasing their exports, with the resulting benefits which usually accompany expansion of trade.

There were strong hypothetical reasons for believing that these tendencies would prevail, if it were true that the producer could obtain labor at the old wages in silver.[b] If he continued to sell at the old gold price he would find, for instance, if silver declined 10 per cent that an unearned profit of this amount over and above his usual profit was left in his hands. If he found that competitors in gold countries were controlling the market, it was in his power to cut under their prices by throwing away a part of the profit due to the decline in silver while still retaining a large part of it. Upon the belief that this would be the course generally pursued by exporters from silver

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[a] International Bimetallism, p. 139.

[b] How these conditions have operated in Mexico is thus set forth by a careful observer: "The progressive lowering of wages as expressed in terms of gold thus gives a margin of profit so long as silver falls faster than the wage of skilled labor rises, a condition which has generally existed for a number of years, because even in the factories, where competition for skilled hands makes the labor cost tend to rise as the price of the manufactured articles go up, it is several years after a severe fall in silver has taken place before any perceptible effect is produced upon wages. The stimulation thus induced has, however, not been a healthy one, even from the standpoint of the industries in question, and it has been most baneful for the rest of the country."—Morrell W. Gaines, "Effects of the silver standard in Mexico," Yale Review (Nov., 1903), XII, p. 285.

countries, and that they would thereby greatly increase their market, was based the fear that in certain lines of manufactures they would destroy competitors in the gold countries, or at least impose upon them the necessity of sacrificing their profits or reducing the wages of labor. Some of these consequences appeared to be suffered by certain industries in Great Britain in their competition with the corresponding industries in British India and other silver-using countries of the East.

It was even contended in some quarters that low gold prices abroad, caused by the fall in silver, tended to reduce gold prices in gold countries. This might have been true if the export trade of gold countries to silver countries was a large part of their total export trade, upon the theory of equilibrium in the value of products exchanged.[a] The real difficulty in the case of those industries which suffered most appeared to be due, however, to the artificial stimulus given by the progressive fall in costs of production, which caused the creation of a volume of products exceeding effective demand, and by special tariff legislation. Thus it was declared by a committee of the Manchester Chamber of Commerce, in 1888, that the special duty levied in British India on English yarn "so assisted in stimulating the trade that more mills were built than could profitably be employed, as shown by a fall of nearly 40 per cent, on the average, in the shares of 19 principal mills in Bombay during the six months ending March, 1885, and at the end of that year 35 out of 52 mills paid no dividend."[b]

After a generation of an almost steady decline in the gold price of silver, however, a survey of the influence upon the silver countries of the rupture of the par of exchange does not indicate that large benefits have been derived by these countries from their monetary policy, or that they have even derived from it the benefits which, upon a priori reasoning, might have been expected. The countries which adhered longest to the silver standard after 1873 were British India, China, and Mexico. British India, as we shall see, changed her system in 1893, but changed it after her governors had been convinced, by careful examination of her economic condition and trade statistics, that she had not derived essential benefits from remaining on the silver standard.

There are two propositions, which may be considered separately, in examining the actual operation of a declining monetary standard: First, whether such a standard does or does not stimulate exports; second, whether, if such a stimulation occurs, it is beneficial to the exporting country.

Upon the first question the statistics fail to afford evidence of a direct and powerful stimulation of exports under the silver standard. Such increase in exports in British India, in China, and in Mexico, as was shown by the valuations in silver, failed to materialize in an actual increase in gold values. The commission which, in 1893, investigated the subject of introducing a change of system into India,

[a] In view of the declining tendency of gold prices, it is declared by Helm that "the endurance of the English producer in the contest with the Indian buyer over the question of who is to bear the brunt of the fall in exchange, has generally proved less effective than that of the latter."—The Joint Standard, p. 141.

[b] Quoted by Helm, p. 147.

made the following observations on this subject in its report to the British Government:[a]

"Although one may be inclined, regarding the matter theoretically, to accept the proposition that the suggested stimulus would be the result of a falling exchange, an examination of the statistics of exported produce does not appear to afford any substantial foundation for the view that in practice this stimulus, assuming it to have existed, has had any prevailing effect on the course of trade; on the contrary, the progress of the export trade has been less with a rapidly falling than with a steady exchange."

In the case of China, the average annual value of the exports rose from £19,242,153 in gold, upon the average of the ten years ending with 1891, to £23,376,360, upon the average of the ten years ending with 1901. Measured in gold, therefore, this increase was only 21 per cent in ten years, or an average of a little more than 2 per cent a year. Such increase of exports as occurred, moreover, was largely to surrounding silver countries, like Japan (under the silver standard until 1897), Korea, the Straits, the Philippines, and Hongkong. The result, in the opinion of expert observers, was that it could not be claimed "that the decline in the gold value of silver has done anything to stimulate the growth of China's exports to gold-using countries, while, on the other hand, it has not checked an expansion of imports from these gold countries."[b]

In the case of Mexico, also, the increase in the exports, when measured in gold, was small for a country which has developed her natural resources to such an extent as has this Republic in recent years. The gold value of the exports from Mexico increased only from $63,328,157, in 1892, to $74,106,200, in 1902, representing an advance in ten years of 18.38 per cent, or less than 2 per cent a year. These figures of the increase in export trade, measured in the gold value of silver, it may be contended do not represent the real increase in the quantity of goods exported. This is the fact, but it involves the additional fact—of cardinal importance in this discussion—that the silver countries have been progressively giving up under the silver standard a larger and larger quantity of the products of their labor in exchange for the products of the gold countries. It is this fact which has impaired the benefits of any increase of trade which they might have derived from falling exchange, and would tend, if continued indefinitely, to leave them poorer in the end than if their trade had not expanded. In the case of Mexico, careful comparison of the quantities and gold values of some of the principal articles exported showed that six selected articles exported from Mexico in 1902, at a reported value of $10,781,090 in gold, would have been worth $16,951,328 in gold if the silver money in which the value was expressed had retained in 1902 the same value as in 1892.[c]

If this fall in the gold prices of exports were found, on examination, to apply in a corresponding degree to the exports of gold countries, it

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[a] Report of the Indian Currency Committee, par. 27. This view was reaffirmed by the committee of 1898.—"Stability of International Exchange," p. 306.

[b] Views of officers of the China Association, May, 1903.—Stability of International Exchange, p. 259.

[c] The Influence of Falling Exchange upon the Return Received for National Products, arguments submitted to the Monetary Commission of the Republic of Mexico, April 18, 1903.—Stability of International Exchange, pp. 431–439.

would not affect the real return received in commodities by the exporting country. This, however, has not been the case. Upon this point an instructive comparision was made by a financial publication of the export prices of certain products of the United States and the import prices of certain leading tropical products. These statements showed that the export price of products of the United States tended to rise, or at any rate not to fall, while the import prices of the articles received from tropical countries tended steadily to fall. The results of the comparison were thus summed up: [a]

"The exports of cotton, wheat, and corn for the fiscal year 1902, which were actually valued at $409,275,000, would have brought at the prices of 1899 only $319,232,000, or $90,000,000 less than was actually received. On the other hand, the average import price of coffee dropped from 14.04 cents for the five years ending with 1897 to 6.89 cents for the five years ending with 1902. The corresponding decline in sugar was from 2.47 cents to 2.26 cents, and of tea from 14.10 cents to 12.79 cents. The imports of these three articles into the United States for 1902 were actually entered at the gold value of $134,861,500, while at the prices of 1897 the same quantities would have been entered at $191,078,600. The United States, therefore, obtained these three important tropical products at $56,000,000 less than it would have obtained them at the prices of five years ago, while at the same time obtaining a considerably enhanced price for its own products."

If these figures could be treated as representative, it would appear that over a very short space of time there was a gain to the United States, a gold country, in its trade with tropical countries, of about $146,000,000 in a total trade of $500,000,000. Undoubtedly other influences than the depressing effects of the silver standard operated upon relative prices in gold and silver countries, but the conclusions of a committee, which carefully investigated this subject, seem to be reasonably justified, "That the ability to reduce gold prices afforded by a depreciating standard, whether of silver or paper, tended everywhere to impoverish the economic forces of the countries having such a standard in their relations with the countries having a more stable standard." [b]

These conclusions have been the result of very recent investigations, and their influence was only vaguely recognized, if at all, down to a recent date. They illustrate the necessity that, for the benefit of the silver countries as well as the gold countries, steps should be taken to restore the par of exchange which was ruptured when the advanced countries universally adopted the gold standard. In the restrictions imposed by the risks of fluctuation upon the investment of capital in the silver countries is probably found the explanation of the failure of their foreign commerce to respond as much as expected to the stimulating influence of falling exchange. They could not find the means for developing their export trade while their monetary system kept foreign capital aloof. This was conspicuously the case in British India and Mexico during the closing decade of the nineteenth century, in spite of the rapidity with which surplus capital was accumulating in the gold-standard countries. The uncertainties of exchange made it unprofitable, if not absolutely hazardous, for the owner of capital

[a] Wall Street Journal, February 16, 1903.
[b] Stability of International Exchange, p. 439.

in a gold country to invest it in a silver country.[a] How this condition restricts the trade of the gold countries has been thus set forth:[b]

"The rich countries surrender their products to the poor countries and accept promises to pay instead of exacting full payment from the poor countries in their products. These transactions are carried on in a manner convenient to all through the medium of the negotiable securities of joint stock companies. The exporter in the rich country who desires ready money for his goods gets it from the domestic or foreign joint stock company operating in the poor country. The latter company sells its shares and bonds in the exporting country and applies the proceeds in money to payment for what it buys in machinery, raw materials, and the means for maintaining laborers. Thus, in effect, the rich country lends its capital, in the form of products, to the poor country, exacting only an annual interest, and not the principal, in return. The great resources of the manufacturing capitalistic nations are thus put at the command of the undeveloped countries where they are capable of yielding the largest returns and the greatest sum of benefits to all concerned in the transaction."

Already this evil of the dislocated exchanges, in its influence on investments, was a subject of discussion in the report of the British gold and silver commission in 1888, when silver had fallen in gold value from an average of $59\frac{3}{16}$ pence in 1873, to $42\frac{7}{8}$ pence in 1888. The evil became much more acute in later years, especially after the drop from the average quotation of $27\frac{3}{16}$ pence in 1901, to $24\frac{1}{16}$ pence in 1902. Under the conditions which then prevailed it was pointed out by the Commission on International Exchange that even short-term loans could not be made safely in the silver countries by capitalists in the gold countries.[c]

The growth of these evils in the trade between gold-standard and silver-standard countries began to attract attention soon after the general adoption of the gold standard in Europe and the United States. That they called loudly for a remedy was denied in few quarters. As to the nature of the remedy and the degree of sacrifice which might properly be made by the gold-standard countries in order to restore stability of exchange with the silver countries, there

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[a] It was declared by Probyn in 1888, before the monetary reform in British India: "There is urgent need for the investment of fresh capital in India. Railways are wanted for its development. Its manufacturing power is capable of almost indefinite expansion. Its mineral resources are believed to be vast. Its internal trade is open to immense extension. One witness examined before the Gold and Silver Commission thinks 'that from £15,000,000 to £20,000,000 might be earned as an annual dividend on money in England for investments in silver-using countries if the money could be protected from the effects of this uncertainty.'"—Indian Coinage and Currency, p. 3.

[b] Arguments submitted by the American Commission on International Exchange, Stability of International Exchange, p. 101. The statistical and political aspects of this subject are more fully discussed by the present writer in The United States in the Orient; the Nature of the Economic Problem, Houghton, Mifflin & Company, 1901.

[c] Several hundred million dollars of American and European capital was awaiting investment in Mexico as soon as that country gets on a gold basis. Mexican bankers could borrow money in Paris, Berlin, or Brussels in large amounts, and make 7, 8, or 10 per cent on the investment, but they dare not do it because if it was loaned on short time and they were called on to repay it the fluctuations in silver might more than wipe out all their profit."—Stability of International Exchange, p. 100.

were wide differences of opinion. For many years there was a persistent—in some respects well reasoned and eminently respectable—effort on the part of economists and statesmen to bring about the correction of the evil by a return to the policy of the double standard, under such a binding arrangement among commercial nations as would tend to insure its successful operation. These efforts completely failed, because they were contrary to the logic of events and were confronted by practical difficulties which proved insurmountable.

The project of international bimetallism approached the subject of regulating the value of silver from the side of demand. It did not undertake to deal with the matter on the side of supply. By creating an unlimited demand for silver at a fixed ratio to gold, by opening the mints to free coinage on private account, it was sought to maintain a fixity of value between gold and silver bullion. The experiment failed, so far as it was tested in the countries of the Latin Union, in British India, and in the United States, because the supply of silver was in excess of the demand at the legal ratio. The demand which was created, while it undoubtedly enhanced in some degree the value of silver by widening the market for it, was too artificial to absorb the product at its old gold value in the face of a growing preference for gold. This was plainly indicated by the accumulation of silver 5-franc pieces in the Bank of France, when the option was open to any Frenchman to obtain them in exchange for gold, if he preferred them.

The problem was approached from another side—the side of regulating the supply— when the proposals of the Mexican Government were made to the United States, in 1903, for securing fixity of exchange between the moneys of the gold standard and of the silver standard countries. It was no longer a proposition to secure fixity of value between gold and silver bullion, but between gold and silver coins. Therein lay a marked distinction. It is easily within the scope of government authority to regulate the quantity of silver coin by providing a supply up to the limit of demand. This regulation of supply was the one factor lacking to success under the project of bimetallism. If the governments of the world which desired to use silver should keep the amount of silver money in use just equal to the need for it, and should take steps to keep this silver at par with gold, either by direct redemption or by the sale of foreign bills of exchange, the problem would be solved of keeping at par coins of both metals. The gold price of silver bullion would then be subject to the play of supply and demand in the market, but the fluctuations in bullion would not affect the value of the coins. That it was easily possible to maintain silver coins at par in gold without reference to the gold value of their contents in bullion, has been demonstrated by the continuous circulation of such coins in the countries of the Latin Union, in the United States, in Java, and in British India, since their value as bullion has fallen 50 per cent below their face value.

This policy of giving a fixed exchange value to silver coins by government control of the output would not be without influence, moreover, upon the market value of silver bullion. It would permit countries whose scale of transactions was adapted to silver money to employ such money in large amounts without being subject to the inconveniences of fluctuations in its gold value, just as in the advanced

commercial countries the subsidiary coins were easily maintained at gold par and the public were thus guarded against the inconvenience of having them fluctuate in relation to the standard coin.[a] An extension of the same principle to the currency most used would permit a larger employment of silver than would otherwise be possible, with equal convenience, and would thereby contribute to widen its market and maintain its price.[b]

The adoption of what was called a gold-exchange system, of this character, escaped another fundamental difficulty of the proposed bimetallic arrangement. This difficulty was to secure a general agreement among commercial nations. No such agreement was required to permit any nation to issue a limited amount of silver coins and to keep them at par with its gold standard. There were advantages in cooperation, especially in regard to the ratio of weight to be adopted between the gold and silver coins, but the difficulties were not insurmountable in the way of independent action by each government. The system of a fixed exchange between gold and silver coins avoids, therefore, two of the cardinal difficulties in the project of international bimetallism. The system of a fixed exchange attacks the problem of the value of silver by adjusting the quantity of coins to the demand for them, instead of endeavoring to create an artificial demand for an indefinite supply, and it permits each nation to act for itself without the cooperation which has been found in practice, after repeated efforts, impossible in the project of international bimetallism.

2. THE END OF THE MEXICAN DOLLAR.

By A. Piatt Andrew, assistant professor of economics, Harvard University.

[From the Quarterly Journal of Economics, May, 1904.]

We of to-day are witnessing the rapid extinction of a coin which for a very considerable period was more widely used than any other known to history. Within fifty years the silver peso issued from the Mexican mints was current throughout the two American continents, circulated in the West Indies and in most of the islands of the Pacific, and was the familiar means of payment among all of the Asiatic markets from Vladivostok to Singapore. Its predecessor, issued when Mexico was still a Spanish colony, had enjoyed throughout the eighteenth century, and much of the seventeenth, a similarly wide currency.

From the Mexican mints, the first of which was established in 1535, emanated the pesos, or "pieces of eight," which, with their divisional pieces, were almost the only coins in use among the English colonists of North America. From the same venerable source

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[a] As Professor Laughlin says: "The circulating medium of India will and must remain silver, and the demands of the people for silver will remain unchanged."—History of Bimetallism in the United States, p. 203.

[b] The instructions given by the Government of Mexico in 1903 to its Commission on International Exchange declared, "The fundamental object of the commission must be to secure the stability of the rate of exchange betwen silver-standard countries and gold-standard countries, without preventing thereby the nations which now use silver coin from continuing to coin it or from consuming it in the same or larger quantities, provided that its value with relation to gold becomes fixed."—Stability of International Exchange, p. 165.

naturally came the coins used in Florida, Cuba, Santo Domingo, Porto Rico, and the other Spanish Antilles. Even before 1600 it is said that they circulated in the Philippine Islands, and had become familiar at such Chinese ports as Canton, Ningpo, and Amoy.[a] During three centuries these coins, under one guise or another, have been pouring out of the Mexican mints and distributing themselves over the two hemispheres. They have played a long and important part in the developing relations between East and West, and at one time or another they have been employed by men of nearly every color and race. To-day, however, they seem destined to disappear completely from international commerce.[b]

The coins of but few other countries have ever attained any extended international currency, and the coins of Austria alone are at all comparable in this respect to those of Mexico. The Maria Theresa thalers, instituted in 1751 and reissued continually since then with the eighteenth-century designs and dates, have been commonly current in Egypt, Abyssinia, and the Soudan, and are known in the East Indies and the extreme Orient. They have made "the male profile and the elegant blazonry of the great Empress more familiar to the black races and to the yellow races than to the white,"[c] but even these dollars of Austria have not conquered many markets when compared in range with the coins of Mexico.

The persistence and universality of the Spanish dollar as a coin of commerce is not difficult to explain. Until the opening of silver mines in our own West some forty years ago, nearly all of the silver used in the civilized world had come from Mexico and Spanish America. More than four-fifths of the silver estimated to have been produced between 1493 and 1850 had been taken from the mines of these regions.[d] It is not strange, therefore, that the Spanish colonies of America, with their unexampled resources of money material and their well-equipped mints, came to supply so many countries with means of exchange. That this condition should have come to be three hundred years ago is the more understandable if one recalls the wide trade relations of Spain at that time and the fact that the Spanish monarchs of the sixteenth century were masters of both of the Indies and controlled the most extensive empire that the world had ever known. Nor is it strange that these coins, once established, have held their own, when one remembers that their standard of weight and fineness has suffered comparatively few alterations since their institution. For a long period, when the neighboring governments were outdoing each other in the way of debasement, the Span-

[a] Robert Chalmers, A History of Currency in the British Colonies, London, 1893, p. 371. Cf. pp. 391–394.

[b] Upon the General subject see J. D. Casasús, El peso Mexicano y sus rivales en los mercados del extremo oriente, Mexico, 1903.

[c] L'économiste français, September 21, 1895, p. 375. See also the Geschichte des Maria-Theresien-Thalers, by Karl Pecz and Josef Raudnitz (Vienna, 1898). These writers estimate the coinage of the Maria Theresa dollars between 1751 and 1897 at 133,200,695. In the years 1898–1903 13,662,700 such dollars were issued from the central mint in Vienna.

[d] The total production of silver from 1493 to 1850 is estimated by Soetbeer as 149,826,000 kilograms, of which Mexico is credited with 63,657,000, Bolivia with 35,064,000, and Peru with 29,432,000. Ad. Soetbeer, Edelmetall-Produktion und Werthverhältniss zwischen Gold und Silber. Gotha, 1879. Further estimates based upon Soetbeer's Edelmetall-Produktion (1879) and his Materialien (1886) are given in Table No. 1.

ish coins remained intact, and their exceptional goodness caused them to be the more eagerly sought abroad and to pass in a steady flow across and beyond the Spanish boundaries. Until the beginning of the eighteenth century the "pieces of eight" underwent no serious debasement, with the exception of certain local issues, such as the Peruvian coins, which suffered "scandalous falsification" about the year 1650, and were accordingly denied currency not only in the British colonies, but in Spain itself.

During the eighteenth century their content was only twice slightly tampered with. In 1728 they were reduced in millesimal fineness from 930^5 to 916^6, and at the same time were lowered in weight by about 1½ per cent; but this was ostensibly to pay for the increased cost of making the more elaborate coins then struck. Again, in 1772, when a great recoinage was accomplished, their fineness was reduced to 902^7, without alteration in weight.[a] The standard both of weight and fineness adopted in 1772 has been adhered to ever since and remains at the present time that of the dollar of the Mexican Republic, which is by far the most important surviving representative of the old Spanish "peso." In all, between 1497 and our own time, according to Professor Sumner, the dollar as a world coin was reduced by only 5.9 per cent.[b]

Since the end of the seventeenth century the output of the Mexican mines has continuously exceeded the combined product of all the other Spanish-American States, and Mexico has held the primacy among all the silver-producing countries of the world, her position in this regard having been contested by the United States only within the last thirty years. Considerably more than a third of all the silver extracted from the earth since the discovery of America has come from her mountain slopes alone,[c] and throughout this long period silver has formed her principal and, for most of the time, virtually her only article of export.

As recently as the fiscal year 1890–91 the silver exports of Mexico were reported as amounting to more than 81 per cent of her total export trade, although to-day they represent less than 40 per cent of that total. Nor has this silver been exported mainly in the form of bullion or of plate or of manufactured ware. Until quite lately most of it has passed through the Mexican mints and has left the country

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[a] Robert Chalmers, A History of Currency in the British Colonies, p. 392. While the legal standard has remained comparatively stable, the law has tolerated an excessive variation from the standard, which has sometimes been taken advantage of at certain of the Mexican mints. Particular issues have thus proved of inferior assay, although within the provisions of the law, and have been so discredited in foreign markets as only to circulate at a discount. This was for a long time the case with the pesos marked G., which indicated that they had been coined in Guadalajara. See J. L. Riddell, A Monograph of the Dollar, New Orleans, 1845. This work contains pictures of 425 varieties of dollars. See also Chalmers, op. cit., pp. 393–394.

[b] W. J. Sumner, "The Spanish dollar and the colonial shilling," American Historical Review, iii. p. 617.

[c] Using the data collected by Soetbeer and Lexis and the directors of the mint in France and the United States, I estimate that between 1493 and 1902 the world's production of silver aggregated about 284,000,000 kilograms, and that of this total at least 107,000,000 kilos came from Mexico. Of the rest the greater part came from Spanish South America—about 43,000,000 kilos from Bolivia, the seat of Potosi, and about 33,000,000 from Peru. The United States has contributed about 44,000,000, almost exclusively during the past thirty years.

in the form of coin. In the appended table[a] one can observe how recent has been the change in these conditions. In 1872–73 more than 93 per cent of the silver exported had been coined; in 1882–83, almost 81 per cent; in 1892–93, about 49 per cent; but in 1902–3 only 27 per cent.

That the situation is rapidly changing to-day is evident from these figures and admits of no doubt. At present Mexico's exports of silver bear a far less important relation to her total trade than ever before, and her export of coin exhibits even more rapidly dwindling proportions. On many accounts the day now seems not far distant when the field of activity for the Mexican dollar will be limited to the Mexican confines, and it is confidently predicted that the outward flow of coins will soon cease altogether, some even apprehending that it will be reversed, and that a back flow will overwhelm the country unless the Mexican Government takes measures of protection against such an event. In the following pages I shall sketch the conditions and occurrences in different countries from which this change originated and through which it is being brought to pass.

We may begin with the

UNITED STATES.

The North American colonists, as has been said, seldom saw any other than the Spanish coins. In the English settlements men naturally continued for a long time to reckon in the traditional terms of pounds, shillings, and pence; but they possessed scarcely any coins of these denominations, and when coin payments occurred they were usually made with "pieces of eight" and "reals." In the course of time the word "dollar" gradually superseded the older terms "peso" or "piece of eight" in referring to these coins, and in the colonial records of the eighteenth century one frequently finds accounts and due bills explicitly reckoned in dollars.[b] During the war for independence, when the Federal Congress issued bills of credit they made them explicitly payable in the Spanish dollars; and when a little later the leaders of the new Republic set about the establishment of a national currency, Jefferson only expressed the common opinion in declaring that among the various currency units the dollar was "the most familiar of all to the minds of the people."[c] It was generally agreed, therefore, to do away altogether with the old system of keeping accounts in pounds, shillings, and pence; and on July 6, 1785, Congress declared the dollar to be the ideal monetary unit for the United States. The following year, on August 8, 1786, they decided that the American Government should itself issue a coin modeled after the Spanish-milled dollar as the same was then current; and adequate provision for its coinage was at length voted in the act of April 2, 1792, establishing the national mint.

Those who framed this act undoubtedly expected that the new dollar of the United States would rapidly supersede its prototype

[a] Table No. 2.

[b] See, for example, Acts and Resolves of the Province of the Massachusetts Bay, vol. iii, pp. 531, 555, 562, 757.

[c] Jefferson's notes on the establishment of a money unit and of a coinage for the United States, written in 1782 or 1783, and printed in the Report of the International Monetary Conference of 1878, pp. 437–443.

upon this continent, and that the Spanish coin after a brief interval would no longer have a place in our circulation; but for several reasons this situation was not achieved until sixty-five more years had elapsed. From the opening of the mint in 1793 until 1857 only 2,675,550 silver dollars were issued, making an annual average of but 41,806 dollars. As many of these passed quickly out of the country, the Spanish coins and later those of the Mexican Republic continued to form an integral part of our currency during all of this period.

The reasons for this situation are well known and may be stated briefly. Congress in 1792 had authorized the issue of an American dollar, of weight and fineness corresponding to the Spanish dollar; but, through an error in assay, it was decided that the Spanish dollars contained only 371¼ grains of pure silver, when in reality they averaged of greater weight.[a] Nevertheless this had been prescribed in the act as the silver content of the American coins, and with such content the new coins were struck. As the dollars began to be issued it was soon discovered that they did not enter into circulation and that a regular profit was being obtained from their export. Being fresh and bright they were readily accepted in the West Indies, and there they could be exchanged for the old but heavier Spanish dollars, which in turn were imported and presented to the mint for coinage.

The expensive operations of the mint, it soon appeared, were resulting in no increase of our national currency, but were merely a source of profit to money dealers. Jefferson, upon learning of this in 1806, at once ordered a suspension of the coinage of the dollar pieces, and for a continuous period of thirty years thereafter not another silver dollar was issued from the United States Mint. Nor was the situation materially altered with the resumption of the coinage of the dollar in 1836. The act of 1834 had in the meantime established a new mint ratio between silver and gold (16 to 1), which for several succeeding decades was destined to undervalue silver and to exclude from circulation not only all full weighted foreign coins, but the new American silver coins as well.

So it happened that for more than sixty years after the founding of the United States Mint, worn and mutilated foreign coins, mostly of Spanish origin, continued to form the larger part of the country's silver currency. In fact, these Spanish-American dollars, with their divisional pieces, were not only a familiar, but a legal means of payment in the United States throughout the period. They were declared by Congress on February 9, 1793, "a legal tender for the payment of all debts and demands"—a provision which was periodically renewed in succeeding sessions; and on January 25, 1834, after the Spanish countries of America had achieved their independence, it was specifically enacted that the dollars of Mexico, Colombia, Chile, and Peru should likewise be made a legal tender. Not until February 21, 1857, did Congress make any serious effort to rid the country of this ignominious chaos of imported coins. Then, at last, all former acts making these pieces current were repealed, and rates were fixed at

[a] Dr. H. V. Linderman says that "the content of pure silver should have been within a fraction of 377¼ grains." Report on Branch Mints, 1872, p. 9. Prof. J. Laurence Laughlin says that "the foreign dollars contained about 373½ to 374 grains pure silver." History of Bimetallism in the United States, 1897, p. 53, note.

which the Government would receive them for a certain period for reminting into American coins.

The year 1857 thus marks the first serious contraction in the field of activity of the Spanish-Mexican dollars. In that year North America was formally closed to the coins which had freely circulated there since the early years of its settlement.[a]

Nor was this the only measure which the American Government adopted to restrict the sphere of the Mexican dollar. A few years later a more aggressive step was taken. The attempt was made to interfere with its circulation in the Far East by the introduction there of a new American "trade dollar," in some respects superior to that of Mexico and intended to compete with it. During the sixties the United States suddenly developed silver resources second only to those of Mexico; and Congress, desirous of assisting American mine owners to secure an oriental market for their product, in 1873 consented to their having their silver stamped at the Government Mint into coins adapted for the Eastern trade.[b] So great was the foreign demand for Mexican dollars at this time that they continually commanded a premium, and as the Mexican Government levied a tax of 8 per cent upon their export,[c] there was every reason to believe that the new American coins, which could be freely exported, and which would be more accurate in mintage and superior in bullion value to the Mexican dollars,[d] would meet a real demand in the East, and might even supersede the Mexican coins in those parts. The ordinary American dollar, containing 371¼ grains of pure silver, had never been well received in China on account of its inferior content. So the new coins were to contain 378 grains, or three-fourths of a grain more than the standard of the Mexican dollar. This would make them worth, at the ratio of exchange prevailing when the act was passed, a little more than $1.04 in gold, and would have the double advantage, it was thought, of rendering them acceptable in the Orient, without danger of their invading the circulation at home.

The new trade dollars, as had been expected, found a ready market in the East. At Hongkong and the Straits Settlements, in French Indo-China, and at several Chinese ports they were made a legal tender along with the Mexican dollars, and the California mint soon found difficulty in turning them out fast enough to meet requirements. Within six years after the commencement of their coinage nearly 36 millions had been struck, and in January, 1877, the leading bankers in China reported that there was "evidence powerful enough to convince the most sceptical" that the United States trade dollar has been a success, predicting that "ultimately it will be current all over

[a] The Spanish and American coins ceased to have a legal standing in Canada in 1853. Chalmers, p. 188.

[b] Adolf Soetbeer, a few years later, proposed that the German Government similarly issue a trade dollar for oriental use, as a means for facilitating the disposal of its surplus silver. Bulletin de Statistique et de Législation Comparée, April, 1877, pp. 235–238.

[c] The export of silver dollars from Mexico had been subject to a tax ever since the conquest. From the year of Independence down to 1857 this tax stood at 3½ per cent. In that year it was raised to 6 per cent, and in 1872 it was raised again to 8 per cent, at which point it stood until its abolition November 1, 1882. Since this last date the export of coined silver has been free.

[d] See appended table, No. 3.

China."[a] The American dollar was thus making rapid inroads upon the territory of the Mexican dollar and threatening it with very serious competition in the Far East, when unanticipated conditions in America resulted in the abrupt cessation of its coinage and its ultimate withdrawal from the field.

The decline in the price of silver reached such a point in 1877 that the silver in a trade dollar was worth not only less than a gold dollar, but also less than the depreciated paper dollars which constituted the circulating medium of almost the entire country. As a consequence large numbers of trade dollars began to appear in circulation. These trade coins really had no legal standing in the country, being neither an authorized tender for debts[b] nor receivable at the public treasury.

In the eyes of the law they were only disks of metal assayed and stamped at the Government mint for foreign use; but they bore on their face the words "trade dollar" and "United States of America," and it was not strange, therefore, that they were frequently given and taken at home at their face value. The confusion was aggravated in the following year, when Congress ordered the renewed coinage of the old standard silver dollar under the Bland-Allison Act (February 25, 1878), for this meant that dollar pieces of even less intrinsic value were to circulate at par under governmental authority. If these smaller silver coins were to be everywhere receivable as equivalent to the gold dollar it appeared but logical that the larger coins issued from the same mint should not be worth less.

Apprehending the increasing misuse of the trade dollar, the Secretary of the Treasury therefore ordered the discontinuance of its coinage on October 15, 1877, and the ban was lifted upon only a few occasions after that date, when small amounts were coined expressly for exportation. The trade dollars still outstanding in the country continued, however, to be a source of embarrassment, until finally, in 1887, Congress decided to get rid of the anomalous pieces altogether. An act was passed upon March 3 of that year authorizing the redemption and recoinage into standard silver dollars of all trade dollars presented during the succeeding six months. The Government had coined in all 35,965,924 of them, of which 7,689,036 were withdrawn under the provisions of the act, a considerable number having been reimported after the passage of the act. The vast majority, however, seemed destined to remain in the Orient, unrepaired and unreenforced until time and use have accomplished their decay or the melting pot has consumed them.

THE PHILIPPINES.

The next and most recent encroachment which the American Government has made upon the domain of the Mexican dollar dates from the Spanish-American war, and culminated in the Philippine cur-

[a] Reports made by the Oriental Bank and the Hongkong and Shanghai Banking Corporation, quoted in H. R. Linderman, Money and Legal Tender, New York, 1878, pp. 57–58.

[b] The act of February 12, 1873, which first authorized the coinage of the trade dollar, had included a list of subsidiary silver coins that were to have a legal-tender power to the amount of $5. In this list the trade dollar was inadvertently included; but the mistake was rectified by a special act passed July 22, 1876, which removed its legal-tender quality altogether.

rency act of March 2, 1903. With the coming of the Spaniards in the sixteenth century the coins of Spain began to circulate in the Philippines, and these coins, and later their successors of the Mexican Republic, have constituted almost the only currency in those islands since then. In 1877, to be sure, the import of foreign coins was prohibited in the Philippines, but as no dollar pieces or pesos were ever issued from the mint in Manila, and as few coins were sent out directly from Spain until 1897, the Mexican dollars, which still retained their power of legal tender, and which were being regularly smuggled into the islands with the knowledge or connivance of the customs officials, remained until 1903 the only monetary standard.

The advent of the Americans brought a very different currency system, based upon a gold standard, into close contact with the Mexican silver-standard system, and some readjustment soon became inevitable. Rates of exchange between the money of the United States and the money of the new oriental possessions were in continual movement, both on account of oscillations in the market value of silver and because the demand for Mexican dollars fluctuated in the contiguous Chinese markets. In December, 1898, for instance, the metallic content of the Mexican dollar had an average value of 46.6 cents. Then it began rising, and by December, 1900, it had risen to 50.5 cents. Then once again the process was reversed, and two years later, in December, 1902, it had sunk to the unprecedented average of only 37.8 cents.[a] Meanwhile the value of the Philippine money was also affected by the changing demand for Mexican dollars in adjacent countries—demands which often could not be readily supplied because of the remoteness of the issuing mint.

In the autumn of 1900, to cite one instance, when more than 3 million in Mexican silver were exported from the Philippines to meet the demands of the foreign forces in China, the exchange rate for the Mexican dollar rose very rapidly above its metallic value, only to fall again a few months later with equal rapidity when the foreign forces in China were reduced. Under such conditions the efforts of the Philippine Commission to maintain the value of the Mexican dollar at 50 cents by temporary makeshifts, such as making appropriations in that money whenever it tended to fall in value, and levying duties upon its export whenever it tended to rise, were predestined to fail.[b] The Commission repeatedly urged upon Congress the necessity of providing a substitute for the Mexican dollar which would continue uniform in its relation to the United States dollar, and which would be so distinctive in character as to impede its export from the islands. This was the advice also of Mr. Charles A. Conant, the special commissioner appointed to investigate the monetary conditions there, in his report to the Secretary of War dated November 25, 1901,[c] and eventually a plan along the lines of these recommendations was adopted by the American Government.

The matter of remodeling the Philippine currency was debated in several sessions of Congress before a bill was devised upon which a majority of both Houses could be persuaded to agree. The Senate

[a] Datos estadisticos preparados por la secretaria de hacienda y credito publico, especialmente para el estudio de la cuestion monetaria, Mexico, 1903, Estado Num. 36.

[b] See Report of the Taft Philippine Commission, made November 30, 1900.

[c] Annual Report of the Secretary of War, 1901, Appendix G.

for long inclined toward the conservative policy of issuing a substitute for the Mexican dollar without disturbing the existing silver standard—an arrangement suggested by the English Bombay dollar then used in the Straits Settlements and at Hongkong, of which we shall hear later on. A majority of the House, on the other hand, voted to introduce a gold standard and the complete American system of coins. The compromise which was eventually effected in the law of March 2, 1903, provided for the adoption of a gold standard, while leaving silver the circulating medium of the country. It made the gold coins of the United States a legal tender for all debts, but provided at the same time for the issue of a new American-Philippine peso of silver, weighing a trifle less than the Mexican dollar, and intended to take its place as the usual currency of the islands. This peso, which contained 3¼ grains more silver than the standard American dollar, was made the legal equivalent of 50 cents in American money (although at the time the act was passed its bullion value was somewhat less than 40 cents), and the Commission was enjoined to preserve this parity by limiting the coinage, by selling foreign exchange, by creating a gold reserve through the issue of certificates of indebtedness, or by "such measures as it may deem proper," no requirement for redemption, however, being stipulated. The Secretary of the Treasury began at once to purchase silver for the new coins, the dies for which had already been prepared in anticipation of the passage of the act. The act was passed in March, but before the end of April the first shipments of pesos had been made, and by the end of 1903 more than 17 million pesos had been sent out. Governor Taft at once instructed all disbursing officers to make no payments in local or Mexican coins after July 1, 1903, and since January 1, 1904, the Mexican and Spanish silver has no longer been receivable for public dues.

The reorganization of the Philippine currency is being carried through with surprising expedition. Before the American occupation there was an amount of Mexican silver circulating in the islands variously estimated as between 20 and 40 million dollars, and there were in addition about six million especially coined Philippine dollars of lighter weight, sent out by the Spanish Government only a few months before the war began. Much of this coin has been shipped out of the country in anticipation of its demonetization, the rest will be purchased as bullion and remade into new Philippine pesos. Meantime, since January, 1904, the further importation of silver coins not upon a gold basis has been forbidden, and, beginning with October 1, 1904, a tax is to be levied upon all written contracts made payable in Mexican or Spanish coin, or other money not based upon gold. The substitution of the new money for the old is being accomplished with some difficulty, because many of the Mexican dollars weigh a trifle less than the Philippine pesos, and are thus preferred in making purchases or in settling debts to the heavier coins, for which a premium not infrequently can be obtained.[a] In the remote parts of the archipelago the process of getting rid of the old coin is not improbably a matter of years. Indeed, it is within the bounds

[a] Fourth Annual Report of the Philippine Commission, dated December 23, 1903, p. 47. See also the Report of the Chief of the Bureau of Insular Affairs, dated October 31, 1903, pp. 6–17.

of possibility that the price of silver should rise again above 64.1 cents per ounce, its nominal value at the present coining ratio of 32.25 to 1, so that the new pesos would be worth more as bullion than as coin. In that event the whole scheme of monetary transformation would fall through.[a] There is little likelihood, however, of such a recovery in the value of silver, and we may safely consider the Philippine coinage act of March 3, 1903, as marking another definitive stage in the contracting field of the Mexican dollar.

One other step in the same direction, which is in part connected with the Spanish-American war, may be mentioned in passing, namely, the change of currency in Porto Rico. The Mexican dollars had furnished the principal currency for the island during a long period, but in 1895 the Spanish Government undertook to supplant them by making a special issue of lighter coins to take their place, and arranged favorable terms for their exchange. The new coins were made of the same weight and fineness as the Spanish pesos and bore identical devices and mint marks, except for the substitution of the words "Puerto Rico" in place of the name of the mother country. One hundred of these coins of lighter weight were given for ninety-five of the Mexican, and about six million were exchanged in this way. The Mexican dollars were thus withdrawn from the island, but their successors were destined to endure only a brief period of service. With the accession of the American Government they in turn were supplanted and demonetized, and under the act of April 12, 1900, the coins of the United States were substituted for them, at the rate of 60 cents in American money for 1 peso of Porto Rican coin.[b]

BRITISH COLONIES IN THE FAR EAST.[c]

If we turn now to the British colonies we are confronted with a long series of tentative and more or less futile endeavors on the part of the British Government to dislodge the Mexican dollars and to establish in their stead the British system of coins. In the former effort the Government has only within very recent years achieved a fair measure of success; in the later effort it has failed completely. If we look no further back than 1825 we find the home Government in that

[a] It was in anticipation of some such contingency that Mr. Conant advocated lowering the standard of the new coins to 0.835 instead of 0.900, so that it would not be profitable to melt or export them until the price of silver rose above 75 cents per ounce. See his report to the Secretary of War, 1901, pp. 21–25.

Colonel Edwards, Chief of the Bureau of Insular Affairs in the War Department, maintains that under the present law the new coinage is in no danger until silver sells at 66 or 66½ cents. "I reach this figure by counting in the expense of transportation, melting, refining, and casting into bars, all of which go to make up the total cost of reducing the coinage to merchantable shape as bullion."—New York Evening Post, September 14, 1903.

[b] See the Report of the Military Governor of Porto Rico on Civil Affairs, pp. 171–174, in House Documents, 56th Congress, 2d session, 1900–1901, vol. 14.

[c] The Spanish dollars circulated in England once for a brief period. In 1804, when the ordinary British silver had been driven out of circulation by the notes issued under the Restriction Act, the Bank of England, with the consent of the Government, had a considerable amount of Spanish dollars restamped and put in circulation. They were not given legal-tender power as between individuals, but the bank was obliged to receive them at the rate at which they were issued. (Lord Liverpool, A Treatise on the Coins of the Realm (1805), chap. xxv.) Illustrations of these restamped dollars may be found in J. L. Riddell, A Monograph of the Silver Dollar (1845), figure No. 29.

year undertaking a systematic plan to force the new British silver coined under the act of 1816 into circulation throughout all of the colonies. The troops were everywhere to be paid in British money, and, in order to give this money general currency, rates were established at which it was to be received in place of the Spanish coin.[a] These orders were far too simple and sweeping to be widely effective, and they remained generally inoperative until the great discoveries of gold in California and Australia came to reinforce them. Then, as the relative value of silver rose, the full-weighted silver coins were everywhere forced out of circulation where gold and silver had been current side by side at a legal ratio. The depreciation of gold was not followed, however, in the British colonies in every case by the adoption of the British currency. In Canada, for example, the gold coins of the United States virtually became the standard, and in Newfoundland a gold standard of a quite peculiar $2 denomination was adopted. But it did have one primary effect. It accomplished the final exclusion of the Spanish and Mexican dollars from the British colonies in America, and except for the republics of Spanish America these coins henceforth were banished to the Far East.

In the British colonies of Hongkong and the Straits Settlements the Mexican dollar has continued to dominate the circulation down to the present time, notwithstanding the efforts of the British Government to displace it. Great Britain came into possession of Hongkong in 1841, and three years later British token silver was proclaimed to be the standard, the home Government confidently expecting that shillings and pence within a brief period would take the place of dollars and cents in the new settlements. This anticipation was formed, however, without sufficient regard either to the character of the British coins or to the habits of the people concerned. Silver had seldom circulated among the Chinese except by weight, and as the British silver had been deliberately underweighted in 1816 it was certain to be discounted by the Chinese, and the proclamation of 1844 was foreordained to remain ineffective. It eventually became evident, even to the authorities, that the Mexican dollars were not to be displaced by this sort of legislation, and a new plan was devised, intended to establish a British currency in the Far Eastern colonies without altering the denomination of the coins then in use. In 1864 it was decided to open a local mint in Hongkong and to issue a British dollar of size and weight like the dollar of Mexico, and this was actually done two years later.

The coins issued from the Hongkong mint for some reason or other contained nearly three grains less of pure silver than the standard Mexican coins, and for this reason and because of their unaccustomed devices they were not at the outset well received by the Chinese. It appeared that they could only be made to circulate at a discount. So after two years of tentative experience with them the colonial authorities became discouraged with the prospective results, closed the mint, and sold its machinery to the Government of Japan. In the course of two years only a little more than two million of the British dollars had been struck, and the experiment therefore can not be said to have been very persistently pursued. That the experiment might have succeeded, if persevered in for a longer time, is indicated by the

[a] Chalmers, pp. 23–32.

fact that these identical dollars were subsequently accepted at par,[a] and still more by the recent success of similar issues.

The trading communities of the Straits Settlements and of Hongkong have several times since then urged a repetition of the experiment; but not until 1895, nearly thirty years after, could the Government be persuaded to make the attempt, the usual reason given for not doing so being the difficulty of furnishing coins at a price low enough to compete with the Mexican dollar. After the summer of 1893 there had been many complaints of a scarcity of Mexican dollars, the rating for which, with the fall in the price of silver, had risen materially above its bullion value. At the same time the Indian mints were without work because of the suspension of the rupee coinage. The occasion seemed peculiarly propitious for a renewal of the British dollar, and the Government accordingly, by an order in council of February 2, 1895, authorized the mints of Bombay and Calcutta to strike dollar pieces for any bankers and merchants who might require them. The new coins, as regards weight and fineness, were to be modeled upon the old dollars of Hongkong and the Japanese yen, and a uniform charge of 1 per cent was to be levied upon their issue. Two of the largest eastern banks guaranteed the experiment by agreeing to take a minimum coinage of five million dollars annually; but it was hoped that the new money, when once established, would command a wide circulation, not only in Hongkong and the Straits Settlements, but also, on account of England's wide trade relations, in countries not under the British Crown. That their hopes have already been successfully realized is indicated by the amount of dollars coined in the intervening years.[b] More than 150 millions have been issued and exported to the English settlements on the Pacific, and, being of superior coinage and unabraded, they have come into circulation in all of the great markets of the extreme Orient. They constitute to-day, in fact, the most serious rival which the Mexican dollar has ever encountered in those ports.

	Number.
1895–96	3,316,063
1896–97	6,135,617
1897–98	21,286,427
1898–99	21,545,564
1899–1900	30,743,159
1900–1901	9,464,991
1901–2	27,198,656
1902–3	31,671,117
Total, eight years	151,361,594

Meanwhile the fractional silver coins of 50, 20, and 10 cent denominations, issued at the mints of London and Birmingham for the colony at Hongkong, have also been making inroads upon the territory in the neighborhood of Hongkong that hitherto has belonged to the Mexican coins. Over 23 million dollars in these coins have been sent out within the past ten years, and the Chinese seem actually to prefer them because of their newness and unimpeachable purity to their own copper cash or the other foreign silver.

In the Straits Settlements a still further step has just been taken toward the extinction of the Mexican dollar. For a number of years

[a] Chalmers, op. cit., p. 376.

[b] From the annual reports of the deputy master and comptroller of the mint, London.

the matter of introducing a gold standard in the Settlements and the Federated Malay States has been mooted, and in 1902 the colonial office appointed a committee to consider the expediency and practicability of such a change. This committee reported in March, 1903, recommending the gradual introduction of "a special Straits dollar of the same weight and fineness as the British dollar at present current in the East, to be substituted for the Mexican and British dollars, the latter dollars being demonetized as soon as the supply of new dollars is sufficient to permit of this being done in safety." When this condition has been attained, the procedure recommended is exactly the same as that which was followed in British India. "The coinage of dollars would cease until the exchange value of the dollar had reached whatever value in relation to the sovereign might be decided on by the Government as the future value of the Straits dollar," and then "the Straits government would issue the new dollars in exchange for gold, and at the fixed rate." [a]

The proposals of the committee were almost immediately adopted. On June 25, 1903, an order was issued for the coinage of a new Straits Settlements dollar, to be of weight and fineness like the Bombay dollars, but to bear distinctive inscription and devices. A few weeks later the new dollars began to be struck at the Indian mints, and the first consignment of new coins reached the Straits in October, 1903. Upon October 2 the further importation into the colony of Mexican or British dollars or Japanese yen was prohibited, the export of the new local dollars being made illegal at the same time. The next step will be the demonetization and reminting of the silver coins now circulating in the country; and then we may expect a halt in the proceedings, in the expectation that the new dollars will rise to a fictitious value in exchange for English gold, as the rupee rose in British India after the suspension of its coinage in 1893. The exact rate at which the par of exchange will eventually be fixed has not yet been announced, but it is generally surmised that it will be at 2 shillings—a rate virtually the equivalent of that recently adopted in the Philippines.

The execution of this plan will mean the complete exclusion of the Mexican coins from another extensive region in which they have long held sway; and the change will affect not only the Straits, but also many of the surrounding native states which constitute the hinterland of the Straits, whose trade is principally with that colony and whose people are naturally co-users of the Straits currency.[b] In fact, the new laws regarding the Straits currency were stretched to cover the Federated Malay States by a series of enactments and proclamations even before the end of 1903.[c] The influence of the change is likely to be still more extensive, in that similar methods may be adopted in some of the other English colonies of the Orient, and will not improbably be followed in neighboring countries as well. As we shall see, an almost identical plan seems about to be adopted in the French oriental possessions, to which we shall next direct attention.

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[a] Report of the Straits Settlements Currency Committee [Cd., 1,556], 1903, pp. 12–13. Many details as to the situation in the Straits Settlements can be found in the Minutes of Evidence and Appendices [Cd., 1,585].

[b] August Huttenbach, The Silver Standard and the Straits Currency Question, Singapore, 1903, pp. 102–103, 127–128.

[c] See, for instance, the order cited in the Report of the United States Commission on International Exchange, p. 294.

INDO-CHINA.

The monetary history of the French colonies in China runs closely parallel to that of the English colonies which we have just sketched. Here, again, we have a region in which the Spanish and later the Mexican dollars had long circulated side by side with native currency; and here again we find the dominant European power undertaking to displace the Mexican coins, first by attempting to force its own money into circulation, then by issuing an imitation of the Mexican dollar, and now at last by the proposed adoption of a gold "exchange standard." France came into possession of Cochin China in 1862, and the following year her coins were given legal tender power there, and began to be paid out by her disbursing officers. They never attained a wide currency, however, and when, a few years later, the depreciation of silver set in, they were of so much greater value in France, where they retained their fictitious power of exchange, that they were no sooner brought into the colonies than they were re-exported. Moreover, the trade of Cochin China, and of Annam and Tonking regions which were later annexed, was for the most part with the ports of China, Singapore, and Hongkong, where the French coins were unavailable and where the Mexican dollars were the usual medium of exchange, and were continually being exported and imported in settlement of trade balances. The futility of the efforts to substitute the French currency system eventually became clear to the French home Government, very much as the similar situation in the English colonies had a few years before become clear to the English Government, and France then fell back upon the expedient which England later tried. With the recognition of the expediency of retaining the dollar currency the question arose whether a French dollar might not be substituted for those of Mexico and the United States then current in the country.

The coinage might in this way still be made to affirm the sovereignty of France, even if the usual French coins could not be made to circulate. The experiment was undertaken tentatively in 1879 with the issue of fractional pieces of the dollar.[a] Then in 1885 a French piastre de commerce of identical weight with the American trade dollar began to be struck. Like its American prototype, the French trade dollar was favorably received, both on account of its accurate fabrication and its superior weight, which somewhat exceeded that of the Mexican dollar and the Japanese yen. This slight surplus, however, which rendered the French dollars popular among the Chinese, was in fact a serious shortcoming as regards their circulation; for, although 13,170,471 were struck during the next decade, scarcely any were ever seen, the majority being hoarded or melted down by the Chinese. Upon this account in 1895 the weight of the French dollar was reduced below the standard of the Mexican coin and almost to that of the yen; and since then the French dollar, like the British dollar, has developed into a formidable rival for the coins of Mexico.

[a] E. Zay, Histoire monétaire des colonies françaises d'après les documents officiels, Paris, 1890, pp. 116–123; Aug. Arnauné, La monnaie, le crédit, et le change, 2d edition, Paris, 1903, pp. 291–328.

In the period since the new French dollar began to be issued in 1895 down to December 31, 1903, as many as 44,000,000[a] of these pieces had been struck; and they appear now to circulate freely and without friction alongside of the other dollars.

Within recent months, in Indo-China as in the Straits Settlements, a further step has been in contemplation. Plans have been debated for bringing the currency around to a gold standard upon the lines of the currency reforms in British India and the Straits Settlements; and, if the changes now under consideration are adopted and successfully carried through, it will soon be a question, not merely of increasing competition for the Mexican dollars, but of their supersession and legal exclusion from still another large tract in the Orient.[b]

JAPAN.

Japan represents another of the oriental countries in which the Mexican dollar was for long firmly intrenched, resisting repeated efforts made to exclude it, but from which it has at last been completely driven within the course of the past twenty years. When the newly constituted Government of Japan some thirty years ago set about the reorganization of the currency, and established a mint at Osaka, with the machinery purchased from the British Government after the fiasco at Hongkong, they were confronted with the universal employment of the Mexican dollar. Though desirous of establishing the currency upon a gold standard, the Government thought it necessary to yield to the general predilection for the familiar silver dollar, but hoped to meet the demand for it with a coin of local mintage. They provided in the act of May 10, 1871, for the issue of a silver coin to be known as the "yen," of size and quality like the dollar of Mexico, and gave it the power of legal tender in the treaty ports, intending that it should take the place there of the familiar Mexican coin. The yen, like the Hongkong dollar of 1866, in reality contained about three grains less of pure silver than the standard Mexican dollar, and, when a few years later it was observed that foreign coins still circulated, the situation was at once attributed to the underweighting of the yen. The Japanese upon this account in February, 1875, raised the weight of their coins from 416 to 420

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[a] The total issue of the second series of French trade dollars is as follows:

1895	1,782,012
1896	11,858,018
1897	2,511,128
1898	4,303,953
1899	4,681,244
1900	13,318,856
1901	3,150,000
1902	3,326,534
1903	10,076,893
Total nine years	55,008,638

From the Bulletin de statistique et de législation comparée.

[b] See the articles of Paul Leroy-Beaulieu in the Économiste français for January 10 and 17, 1903; also the Report of the United States Commission on International Exchange, Appendix H, pp. 379–391. The various decrees and ordinances regulating the currency of Indo-China, issued between 1862 and 1900, may be found in the Rapport du directeur de la monnaie au ministre des finances. Septième année, 1902, pp. 378–425.

grains, the weight of the successful American trade dollar, at the same time changing the name of yen to boyeki gin, or trade dollar. The experiment proved futile as a means of expelling the undesired pieces. It had in fact just the contrary effect, of attracting them to Japan in exchange for the heavier Japanese coins; and in 1878 the Government decided to suspend the further coinage of the trade dollar and to revert again to the issue of the lighter yen. At the same time they gave to that coin full legal-tender power throughout the country.

During the years which followed, as the value of silver declined, the Japanese mint was called upon to coin larger and larger amounts of that metal; and the yen grew more and more familiar and more and more popular. It became in fact a doughty rival of the Mexican dollar, not merely in Japan, but in all of the great entrepôts of the Far East. Being of superior design and less frequently counterfeited, it enjoyed peculiar credit throughout the Orient, and before the appearance of the Bombay dollar in the middle nineties the Japanese silver coins were probably the most familiar of all coins in the Straits Settlements and the Malay Archipelago,[a] and were freely current also in most of the ports of China, Korea, Indo-China, and Siam. Between 1871 and 1897 more than 165,000,000 of them were issued, and of this total more than 110,000,000 had been sent abroad. So, while the Japanese yen gradually ousted the Mexican dollars from the Japanese trade centers, at the same time they had invaded much of the territory which hitherto had been the exclusive domain of the Mexican coins.

Just at this juncture, when the Japanese silver yen had conquered so many of the markets of the East, the Japanese stopped their coinage, and at the same time took steps toward their demonetization within the boundaries of Japan. The fluctuations in the price of silver had for long rendered trade with Europe and America exceedingly unreliable, and for years the government of Japan had had under advisement the possible adoption of a gold standard. The receipt of the indemnity money from China after the war of 1894–95 at last made this possible, and in March, 1897, a law was promulgated declaring a new gold coin, thereafter to be known as the yen, to be the standard unit, and restricting the future coinage of silver to underweighted coins of subsidiary denominations. The coinage of the silver yen, which had found so ready a market from one end of the Orient to the other, thus came to an end. Those of the coins which had remained within the country—about 46 millions in all—were redeemed in gold, and were either made into subsidiary silver or sent abroad for sale in Hongkong, Shanghai, and elsewhere. After the 31st of April, 1898, the circulation of the silver yen in Japan was prohibited, and after July, 1898, it was no longer acceptable by the Government for taxes or public dues.

In the course of two decades the Mexican dollar had been driven from Japan, and there had even ceased to be in that country any coin of equivalent size and denomination. Yet in the meantime Japan had injected into the oriental trade the greatest number of competing

[a] See Count Matsukata Masayoshi, Report on the Adoption of the Gold Standard in Japan, Tokyo, 1899, pp. 284–306. Upon the general subject of Japanese currency this work and Count Matsukata's Report on the Post-bellum Financial Administration of Japan (Tokyo, 1901) are the best authorities.

coins that the Mexican dollar had ever encountered up to that time. It might be added, in passing, that in the newly acquired territory of Formosa[a] the Mexican dollar and the Japanese yen also ceased to be legal tender after 1897–98, and that the gold standard coins of Japan were installed in their stead.

CHINA.

If we turn last of all to China, we find even here the sway of the Mexican dollar meeting challenge in our day. Ever since the sixteenth century, when the Spanish dollars were introduced from the Philippines, these coins have been widely used. The Chinese Government until very recently had never issued silver coins of its own, but local rulers and well-known firms had authenticated the standard of the foreign coins and given them a local character by marking them with a special stamp.[b] The coins by far the most familiar to the Chinese were those of Spain and Mexico, circulating by weight, and often stamped or chopped by their indorsers beyond all possibility of recognition. During the past decade, however, these Mexican dollars have been subjected to competition in China, not only with the British dollars and Japanese yen, but also with local issues, very much as they have in other countries. Various of the Chinese provinces have established their own minting machinery, and have begun to turn out local coins in imitation of the Mexican dollars. The first such mint was opened in Canton in 1890, but to-day similar provincial establishments are coining dollars at Foochow, Nankin, Chungking, Tientsin, Moukden, and Kirin,[c] and in April, 1903, an imperial edict provided for the establishment of a national mint at Peking to issue uniform coins for the whole Empire.[d]

The coins as yet struck in the local mints have been unreliable as to weight and fineness, and we have no complete record as to their amounts. They appear to have met with little success in supplanting the Mexican dollars. With the opening, however, of a carefully regulated imperial mint maintaining an unvarying standard, and the adoption of these national coins by the various treasuries for purposes of public revenue and expenditure, the eventual supersession of the Mexican dollar within its last oriental stronghold may be confidently expected. Should the suggestion of the American Commission on International Exchange, that China issue at once 200 million such coins, be adopted, this outcome will be attained in a very short time.[e]

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[a] Matsukata, The Adoption of the Gold Standard in Japan, pp. 379–389.

[b] Upon the general subject of Chinese currency see H. B. Morse, "Currency and measures in China," in the Journal of the China Branch of the Royal Asiatic Society, vol. xxiv (1888–89); Talcott Williams, "Silver in China," in the Publications of the American Academy of Political and Social Science for May 8, 1897; J. Edkins, Chinese Currency, Shanghai, 1901, and the article of Consul-General Jernigan in the History of Banking in All Nations, New York, 1896.

[c] Report of the Director of the Mint, 1902, p. 280.

[d] Ibid., 1903, p. 217.

In the commercial treaties recently concluded with China by Great Britain (September 5, 1903), the United States (October 8, 1903), and Japan it was distinctly stipulated that China "take the necessary steps to provide for a uniform national coinage." Report on the Introduction of the Gold Exchange Standard into China and other Silver-using Countries, submitted to the Secretary of State October 1, 1903, by the Commission on International Exchange, pp. 201, 221, 224.

[e] Report of Commission, p. 52.

In a future, then, which is not remote, the Mexican dollar will cease to fulfill the functions of an international coin, which it has performed without interruption for nearly four centuries. The coins which have served so long as money for most of the peoples of Eastern Asia, in the British possessions of North America, in the Spanish West Indies, and elsewhere, will no longer be current outside of the Mexican boundaries. Nearly half a century has already elapsed since these coins were banished from the United States and Canada, but until within a decade they had held their own in the Orient. One by one in the East rival dollars have appeared, lived for a brief day, and disappeared. The British dollars of Hongkong were issued for only two years (1866–1868); the American trade dollars survived for fourteen years (1873–1887; and, last and most formidable of all, the Japanese yen were issued for twenty-six years (1871–1897).

Two rival dollars of importance continue to be coined and used through the Orient to-day—the British dollars of Calcutta and Bombay and the French piastres of Indo-China—but the expulsion of the Mexican dollar must be credited not so much to the competition of these silver coins as the swift and all-pervading drift of the Orient toward a gold standard, which threatens the extinction of the Mexican and the competing dollars alike. The already accomplished adoption of gold as a standard in Japan and in the Philippines has virtually excluded the hitherto familiar coins from those regions, and the prospective changes now hanging fire in the Straits Settlements, Indo-China, and even in the Chinese Empire itself, will probably seal the doom of the Mexican dollar throughout the rest of the East. The coin which has literally been a "universal unit," known in every region of the earth, will soon have only a local range; and what is more, as we shall presently see, it is not unlikely that even in Mexico it will be superseded, or become ere long only a subordinate and overvalued token.

MEXICO.

The general movement which we have been observing would seem destined to leave Mexico isolated as regards her currency and seriously crippled as regards the most important factor in her export trade. But Mexican financiers have for some time foreseen the situation which was impending, and the Government has wisely done what it could to provide against such contingencies. Since early in 1903 monetary commissions and subcommissions appointed by the Government have been busily investigating plans of currency reform for Mexico which will bring her monetary system into line with those of most of the great trading nations, and they have been spreading before her public bewildering arrays of figures and data relevant thereto.[a]

The proposal has now been made by one of these commissions to close the mints to the free coinage of silver, to prohibit the reimportation of the present silver dollars, and to issue in their stead a new

[a] The following volumes have been issued by the Commission:

Datos para el estudio de la cuestion monetaria en Mexico, 1903.

Datos estadisticos preparados por la secretaria de hacienda y credito publico, especialmente para el estudio de la cuestion monetaria, 1903.

Datos sobre rentas de fincas urbanas in la ciudad de Mexico, 1903.

An excellent account of the Mexican currency problems has been written by the secretary of the commission, Sr. Jaime Gurza, Apuntes sobre la cuestion de la plata en Mexico, Durango, 1902. This is also republished in the first volume of the Commission's Datos mentioned above.

dollar, which for the future is to be maintained at a stable ratio with gold by some such system as that which the United States has put in operation in the Philippines. Whether, however, legislative approval for these proposals can be secured is a matter so doubtful that the denouement of the present agitation can not as yet be safely surmised.

Meanwhile the Mexican Government has taken steps in another line, and has adroitly promoted measures aimed to restrict the losses which her mine owners were likely to suffer through the dwindling export of silver dollars. The general adoption of a gold standard in the Orient threatened to reduce the market not merely for the coins of Mexico, but for her uncoined silver as well, and suggested the grim possibility of an even further decline in the value of that metal. An outlook so portentous for Mexico's leading industry called for immediate action; and the Mexican Government met the situation shrewdly, though, as it proved, ineffectively. Her officials plainly saw that, if the Oriental governments and the European powers, especially those having dependencies in the Orient, could be induced to purchase and coin silver in regularly continued amounts, notwithstanding their adoption of a gold standard, the foreign demand for Mexican silver might survive the extinction of the Mexican dollar, and the price of silver might be saved from a further decline.

The American Government was accordingly approached by Mexican representatives, and solicited to cooperate with the other countries concerned through diplomatic channels in an effort "to restore and maintain a fixed relationship between the moneys of the gold-standard and the silver-using countries," and after various maneuvers the American Congress was induced in March, 1903, to make an appropriation for this purpose. The upshot was the appointment of the "United States Commission on International Exchange," which, accompanied by a similar delegation from Mexico, visited the leading European capitals during the summer of 1903, with a number of proposals for the stabilizing of exchange rates between gold and silver using countries. The suggestions advocated by the American commission were of two sorts. First, they proposed the inauguration in China of a uniform silver coinage, to be maintained at a fixed ratio with gold—a plan which required that China should "coin as rapidly as possible 200,000,000 silver coins * * * about the size of a Mexican dollar."[a] Second, they proposed that the powers cooperate in maintaining the price of silver by agreeing for a period of years in advance to purchase regular amounts of bullion.[b] The Mexican

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[a] Report of Commission, p. 52.

[b] The position taken by the commissions has been so misunderstood in many quarters that it may be worth while to call attention again to the fact that the purpose was not to increase the price of silver but to steady that price in order to stabilize exchange. A great increase in price was considered as harmful as a great decrease—possibly even more harmful.

It should be noted also that no proposal was made to any country to buy any bullion in order to maintain the price. It was suggested only that the purchases actually to be made for coinage purposes be declared beforehand and be made with regularity—a suggestion which has been actually accepted and followed by Great Britain in its purchases for India. A careful reading of the Mexican proposals referred to shows that they were estimates as to the probable needs for actual coinage of the various governments. The Mexican commission, if those estimates were approved, suggested that the governments buy those amounts with regularity. No stronger opponents of the principle of buying silver not needed, in order to maintain the price, could be found than the Mexican commission. See Report of Commission on International Exchange, Vol. I, pp. 51, 179, 180, 182, 195–197.

delegates even went so far as to suggest the exact amounts which each Government should purchase, the combined engagements to aggregate an annual total of 96,000,000 ounces.[a] Either of these plans, if realized, would help to prop the sinking value of silver, would promote greater stability of exchange with the remaining silver-using countries, and incidentally would be of benefit to the silver-producing interests of the world. Unfortunately, however, for those concerned, the voluminous arguments of the American delegates aroused only a lukewarm interest. The British representatives made no reply other than by a series of vague and general resolutions,[b] occupying less than a third of a page.[c] The French commission replied with more elaboration, but expressed dissent from almost every detail of the American plan.[d]

Brief and variant opinions were also received from the delegates of Russia, Germany, and Holland.

As regards the reform of the Chinese currency (a proposition which after all was not an affair of direct concern to European governments), there was little objection upon general principle; but there were many misgivings, reservations, and differences of view as to method. Concerning the second proposition, that the various governments should make regular purchases of silver, the French delegates thought it "dangerous" and "useless to dwell on;" the British delegates opined that it "might be adopted as far as possible in each country, subject to its monetary policy and convenience;" the delegates of one or two other countries courteously acceded to its principle. But no government seems likely to take any step toward its practical adoption.[e]

The efforts of the Mexican Government to secure international assistance in support of the silver market seem to have been without avail. Mexico remains to-day still confronted with a contracting market for her leading export and with one of the knottiest of money problems to disentangle.

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[a] Report of Commission, pp. 187–188, p. 129.

[b] The British resolutions were of the form and nature suggested by the American commission, who wished only a brief statement of general principles. They met the American views in all particulars but one. They stated that the new silver coins for China should be given a gold value "as soon as practicable." The Americans would have preferred the words quoted to read "when introduced."

[c] Report of Commission, p. 141.

[d] Report of Commission, pp. 146–162. The following passage from the French report well illustrates the attitude of the French commission: "In order to maintain the commercial quotations of silver, the producing countries invite the consuming countries to give regularity to the demand, while they declare themselves unable to give regularity to the supply. It is useless to dwell on the unusual character of a proposition which tends to invite on the part of Europe an intervention contrary to all economic principles to fix the price of a commodity at the very moment when it is declared that fidelity to these same principles prevents the giving of regularity to production."

[e] See Appendix F 5, p. 497. This shows that the British Government has adopted the policy in its purchases for India with the results anticipated by the Commission on International Exchanges.

TABLE 1.—*Production of silver—Estimated output of silver in the principal silver-producing countries, in kilograms (000 omitted).*

	1493-1850.	1851-1875.	1876-1900.	1493-1900.
Mexico	63,657	12,548	27,097	103,302
Bolivia	(?) 35,064	(?) 2,650	(?) 4,260	41,974
Peru	(?) 29,432	(?) 1,790	(?) 2,570	33,792
Austria-Hungary	6,861	909	1,338	9,108
Germany	5,850	2,055	4,372	12,277
Russia	2,031	398	251	2,680
United States	....	5,271	35,071	40,342
Other countries	6,932	5,383	16,805	29,120
Total world's production	149,827	31,004	91,764	272,595

This table is compiled for the earlier periods from the estimates of Soetbeer and Lexis, and for the later periods from the mint reports of the United States and France. Although many of the figures are uncertain and have been differently estimated in other investigations, I find no variations which would seriously affect the relative positions of the different countries as contributors to the world's silver supply.

TABLE 2.[a]—*Exports of Mexico.*

[Exports expressed in millions.]

Fiscal years.	Total exports in Mexican dollars.	Exports of silver in Mexican dollars.	Percentage of silver exports to total exports.	Percentage of coined silver in silver exports.
1881-82	29,207	15,822	54.17	73.69
1882-83	41,919	28,601	68.22	80.72
1883-84	46,861	32,524	69.40	80.45
1884-85	46,812	32,878	70.23	77.47
1885-86	43,797	29,243	66.77	75.28
1886-87	49,330	33,041	66.98	67.26
1887-88	49,079	30,399	61.93	55.39
1888-89	60,380	38,157	63.19	59.87
1889-90	62,680	38,054	60.71	60.89
1890-91	43,426	35,489	81.72	49.98
1891-92	75,661	48,145	63.63	55.48
1892-93	88,045	55,479	63.01	48.97
1893-94	80,084	45,620	56.96	38.11
1894-95	95,020	48,138	50.60	35.47
1895-96	110,022	59,056	53.67	34.50
1896-97	117,784	59,578	50.58	24.47
1897-98	138,068	67,637	48.98	26.90
1898-99	148,454	67,281	45.32	20.98
1899-1900	158,248	63,584	40.17	17.10
1900-1901	158,009	72,421	45.83	22.27
1901-1902	168,041	59,582	35.45	19.05
1902-1903	197,729	77,555	39.22	27.21

[a] This table is taken from the Datos estadisticos preparados por la secretaria de hacienda y credito publico, especialmente para el estudio de la cuestion monetaria, Mexico, Palacio nacional, 1903.

TABLE 3.—*Silver content of the Mexican dollar and its competitors.*

Name and date of origin.	Weight.	Fineness.	Pure silver.
	Grains.		*Grains.*
Mexican dollar	417 13/16	902¾	377¼
American standard dollar	412½	900	371¼
American trade dollar (1873)	420	900	378
Spanish 5 peseta piece } Spanish Philippine dollar (1897) }	385⅘	900	347¼
American Philippine peso (1903)	416	900	374⅖
Hongkong dollar (1866)	416	900	374⅖
Bombay and Calcutta dollar (1895)	416	900	374⅖
Straits Settlements dollar (1903)	416	900	374⅖
French trade dollar (1885)	420	900	378
French trade dollar (1895)	416¼	900	375
Japanese yen (1871)	416	900	374⅖
Japanese trade dollar (1875)	420	900	378
Austrian Maria Theresa dollar (1751)	433	833⅓	361

TABLE 4.—*Coinage of silver dollars.*

Mexico—Silver coinage of all denominations:	
Colonial period, 1537–1821 million pesos	2,082
Since independence, 1821–1903 do	1,466
Entire period, 1537–1903 do	3,548
Coinage of 1-peso pieces, 1874[a]–1903 do	674
Austria, Levant dollars, 1751–1903	146,863,395
United States:	
Standard dollars—	
1792–1873	8,031,238
1878–1903	580,045,090
1792–1903	588,076,328
Trade dollars, 1873–1887	35,965,924
Philippine pesos, 1903	17,883,250
British India—Bombay and Calcutta dollars, 1895–1903	151,361,594
Hongkong:	
Dollar, 1864–68	2,108,054
Fractional silver, 1893–1902	23,550,000
Straits Settlements—Dollar, 1903	
Indo-China:	
French trade piasters, first series, 1885–1895	13,170,471
French trade piasters, second series, 1895–1903	55,008,638
Japan—1-yen pieces, 1871–97	165,133,170

3. COMMENTS ON MONETARY CONDITIONS.

(a) TRANSLATION OF EXTRACT FROM THE REPORT OF THE BOARD OF ADMINISTRATION OF THE BANK OF INDO-CHINA MADE AT THE GENERAL MEETING OF SHAREHOLDERS ON THE 11TH OF MAY, 1904.

[Printed in l'Économiste Français of June 25, 1904.]

The fluctuations in exchange of the white metal have been, in fact, as great in 1903 as in the preceding year. The lowest and highest rates on the London market have been respectively 21 11/16d. and 28½d. per standard ounce. Parallel with this the value of the dollar (piastre) went down in February, 1903, to 1.95 francs, and strating from this date it gradually increased in value until it reached 2.40 at the beginning of September, after which it fell again. These variations, which amount to more than 20 per cent between the extreme rates, render business particularly difficult on account of the risks which they bring about.

In consequence the countries in the Far East, one after the other, have sought for a remedy, or at any rate for a palliative, for a state of affairs so dangerous. Following the example of Japan, Siam has tried, without having been entirely successful up to the present, to avoid this instability of exchange by adopting a monetary policy like that so happily established in British India.

The Philippines, on the other hand, have carried out with complete success their monetary reform. Finally the Straits Settlements are now engaged in the same work, and each country has coined a new dollar for its own special use, to which it will try to give a fixed value.

On the other side, the great producers (we mean the United States and Mexico) being directly affected in an important branch of their export trade, were moved by a condition of affairs which was daily becoming worse. They were then entirely prepared to give a good reception to the overtures from China when that country, frightened

[a] Statistics as to the number of these coins issued before this period are not available.

by the consequences for itself which the fall in the value of silver brought about by compelling her to make unforeseen sacrifices in order to pay in gold the amount due on the debt of the war indemnity, turned to those countries to ask for aid, of which it recognized the necessity. The American and Mexican Governments responded to this appeal by naming a Commission, composed of the eminent men of each of these two countries, most skilled in economic and monetary questions. This Commission went to the principal countries of Europe which have business relations with the Far East.

After a brief stay in London, where it studied the principles of a monetary system suitable to be introduced into China, and one the establishment of which the English Government declared that it was willing to assist, the delegates of the United States and Mexico came to France. They explained the purpose of their mission and the means which appeared to them the most appropriate to bring about the result which they desired to a commission appointed by the minister of finance, under the enlightened and competent presidency of the governor of the Bank of France. Those of their propositions which had to do more especially with the monetary reform in China appeared to be such as to afford real benefits. The same explanation was then given in Germany and in Russia.

The study of this important question is now being carried on in China itself. It would be extremely desirable if the assistance of all these good wishes would bring about the establishment in China of a monetary system having more unity and stability than the customs now common there.

As regards Indo-China, where the fall in silver had produced feelings and results no less important, the thorough study which was given to the subject by the department of colonies ended in practical conclusions, some of which have already been put into effect. It had appeared, in fact, that the end to be obtained was the establishment in their colony, so far as economic conditions would permit, of a system like that of British India. This result was to be brought about by successive steps. It was necessary in the first place to permit, even to assist the exportation of Mexican dollars, which the export tax of 3 per cent was retaining in the colony. It was necessary, then, to prohibit the importation of new Mexican dollars in such a way that the circulation should be, progressively, more and more made up exclusively of French commercial dollars (piastres). The Government of Indo-China did not hesitate to adopt this measure, the effect of which was immediately felt, if we may judge by the reserves of our branches. While last year they were composed in great part of Mexican dollars, they are no longer composed, so to speak, of anything but French dollars. We may all, then, foresee the time when the Mexican dollars will have been demonetized.

It is indispensable, however, before making the French dollar the sole legal tender, to introduce into Indo-China a considerable quantity more of that money. In fact, since the adoption of that piece of money in 1879 and the beginning of its minting in 1885 there have been coined by the mint in Paris up to the 31st of December, 1903, and introduced into China, both by the Government and by our banks, $70,194,979, French commercial dollars, without taking account of the subsidiary coins; or, as up to the 8th of July, 1895, the weight of these dollars was 27.215 grams, a weight sensibly greater than the

Mexican dollar, there was still a profit in exporting them to China for melting, so that it may be estimated that the $13,140,471 of that weight which were coined have disappeared from circulation. The quantity of money which remains in the country appears, then, still insufficient, taking into consideration the importance of the population and the habit of hoarding, which remains among the Annamites.

(b) TRANSLATION OF AN ARTICLE ENTITLED "LA VIE FINANCIÉRE" FROM THE REVUE ÉCONOMIQUE INTERNATIONALE OF MARCH, 1904.

The year 1903 added still more to the monetary discredit of silver in spite of certain appearances, and in spite notably of the better support of the price of the white metal on the London market. Silver was ruling still, in fact, without exception, as a monetary standard throughout the Far East, India and Japan excepted, when at the end of 1902 the measures taken by Siam were accompanied in the neighboring colonies, and even in China, by a movement of reform in the monetary systems which has continued throughout the year 1903.

By a decree of November 25, 1902, the Siamese Government had by implication substituted gold for silver as the base of the monetary system, by giving to the tical of silver a fixed rate of exchange in relation to the pound sterling. It was doubted at first whether the reform would be seriously followed up. Would the Siamese Government be in a condition to maintain the rate adopted? Such a question was certainly justified after all the difficulties which were felt in India by England to carry out such a reform after 1893. But the Siamese Government proceeded cautiously, raising only gradually the nominal value of the tical. Representatives of the banks led the Government to adopt in the first place the rate of 20 ticals for a pound; then the price of silver having improved little by little, this rate was without difficulty carried to 18¾ ticals per pound on the 11th of March, and to 18¼ in October, approaching thus to the limit of 17 ticals per pound, which the Government proposes, for the present at any rate, to reach definitively. The legal ratio of gold to silver will be found, then, to have been raised from 1 to 40 to about 1 to 34.

At the same time that the Siamese reform was made public the English and French Governments each created a commission charged with studying the question whether the time were opportune to bring about a like reformation in the monetary systems of their dependencies nearest Siam, the Straits Settlements and the Malay States on the one hand and French Indo-China on the other.

The English commission, which sat at London, went into a thorough investigation of the different interests affected. The results were published in May, 1903. After having cleverly freed its hands by declaring that in the actual condition of the monetary systems the question was only that of doing away with commercial uncertainty, or rather of transferring it from one frontier to the other—from the frontier of the countries on a gold basis to that of countries on a silver basis—the commission busied itself with calculating the relative importance of the two commercial parties interested. It then declared that the business of the Straits Settlements with countries on the gold basis was far superior to the transactions with countries on the silver basis.

Nevertheless, the commission concluded prudently in these words: "We do not believe that a gold standard ought to be imposed on the Straits Settlement against the will of the Government and of the population, but we think that the Government of His Majesty ought not to raise any objection to the principle of the change, provided that the Government of the Straits, after having studied all phases of the question, were to decide finally in favor of the change from the silver standard to the gold standard." In view of this eventuality, the commission indicated besides what steps the reform policy should follow. It would be suitable to create a special kind of a dollar for the Straits, exclusively coined by the State, and intended to circulate at first concurrently with the trade dollars and the Mexican dollars. Then these last moneys would be gradually eliminated from the circulation and their use prohibited. Finally, a fixed rate of exchange would be adopted between the pound and the new dollar. The Government would make secure the maintenance of this parity by a policy similar to that followed in India. The suggestions were, in fact adopted in September by the Government of the Straits and were extended to the Federated Malay States. The first shipment of the new dollar arrived in the colony on the 3d of October.

The results of the work of the commission appointed in France on the 6th of December, 1902, to study the monetary system of Indo-China have not been published. However, from information collected by representatives of parliamentary committees, as well as by certain journals, it is clear that its conclusions have been substantially the same as those of the English commission of the Straits Settlements. It appeared that the stabilization of the rate of exchange of the dollar (piastre) at a fixed value in gold was desirable, but that certain preparatory measures ought to be taken first. It was necessary to extend the circulation of the French dollars, to substitute them little by little for the Mexican dollars, and finally to prohibit the use of the latter. Only then could the gold standard, in terms of the law at least, be introduced. This policy, furthermore, has not remained a mere plan; they have purchased silver; they are coining new dollars. The first part of the programme is being put into effect.

4. COINAGE, CURRENCY, AND EXCHANGE, 1903.

[From the Indian financial statement for 1904-5, Indian office, March 23, 1904.]

19. During the year now drawing to a close our coinage operations have been on a very large scale, and the issues of new rupees, including recoinage of withdrawn issues, have amounted to no less than a sum of R. 13,94,91,408, in addition to which we coined for native states rupees to the value of R. 12,15,682. I submit the figures of coinage during the last four years:

	Rupees.
1900-1901	17, 14, 79, 318
1901-2	4, 95, 20, 460
1902-3	11, 27, 22, 680
1903-4 (11 months only)	14, 07, 07, 090

20. There have been very heavy demands for currency in connection with the disposal of the bumper rice crop in Burma, the large cotton crops in Bombay and central India, and the generally good crops of cereals and seeds. The demands for currency began this year somewhat earlier than usual, and the strain on our resources was at its height toward the close of the first week of January, fully six to

seven weeks before the usual period. A certain nervous anxiety prevailed for a time in financial circles, particularly in Calcutta, induced by the rapid and unusually early decrease in the stock of silver coin held in the currency reserve, which fell on the 7th of January to so low a figure as R. 7,50,76,000. Although the strain came, as I have pointed out, unusually early and surprised many, government had taken measures in good time to meet possible difficulties, and within one week from the date of low-water mark—that is, by January 15—and notwithstanding the continuance of very heavy demands, we added approximately a crore to the amount of rupees in the currency reserve, and by the end of February we held in the currency reserve approximately 10¾ crores, or about 3¼ crores more than on January 7. In this connection I may mention that the withdrawals of rupees from the currency reserve during the single month of December amounted to no less than R. 4,05,23,000. The nearest approach hitherto to this extraordinary figure was in January, 1903, when the withdrawals reached R. 3,77,17,000.

21. I submit a table which I think will be found of interest, showing month by month the gain or loss in the stock of rupees held in the currency reserve during the last four years, such gain or loss being calculated without reference to the additions which have been made from time to time by new coinage. It will be observed that the total loss during the period has amounted to approximately 21¾ crores, and I may mention that the amount of new rupees coined for government, exclusive of recoinage of withdrawn rupees of 1835 and 1840 issues, has during the four years amounted to approximately 26⅓ crores. The withdrawals of rupees from the currency reserve do not in any way necessarily correspond with the amounts of new coinage, but there will, in existing circumstances, be a certain general connection between them. There will only be a direct correspondence when gold is taken from the currency reserve to purchase silver for coinage; but silver may also be purchased from the proceeds of council drafts or locally, and, moreover, differences will arise on account of coinage for native states and coinage to replace withdrawn rupees of early issue. The two latter sources of differences have been allowed for in the following statement:

[In thousands of rupees.]

Month.	1900-1901.	1901-2.	1902-3.	1903-4.	Average.
April	− 2,21,73	−1,77,62	− 85,07	− 2,14,76	−1,74,79
May	+ 10,37	+ 17,84	+ 45,50	− 18,26	+ 13,87
June	+ 1,00,13	+2,59,88	+1,57,57	+ 91,65	+1,52,31
July	− 68,40	+ 51,30	+ 91,34	+ 21,62	+ 23,97
August	− 2,06,69	− 80,48	− 53,18	− 1,15,00	−1,13,84
September	− 1,94,51	− 77,73	−1,09,34	− 2,25,77	−1,51,84
October	− 1,90,43	+ 76,55	− 47,60	+ 12,30	− 37,30
November	− 1,03,08	+ 2,93	− 88,25	− 1,97,82	− 96,56
December	− 1,76,25	−1,95,18	−2,14,29	− 4,05,23	−2,47,74
January	− 2,04,44	− 83,60	−3,77,17	− 2,12,86	−2,19.52
February	− 2,04,06	−1,10,69	−1,93,86	− 2,02,10	−1,77,68
March	+ 1,62,98	+ 34,51	− 3,14	....	+ 64,78
Total gain or loss	−12,96,11	−2,82,19	−8,77,49	−14,66,33	−9,80,53
Add on account of coinage of native states in 1900-1901 and withdrawals of old issues	+ 3,73,69	+1,16,58	+8,07,25	+ 4,52,10	+4,37,40
Net gain or loss	− 9,22,42	−1,65,61	− 70,24	−10,14,23	−5,43,14

+ Gain. — Loss.

22. In anticipation of the heavy demands certain to arise as the result of exceptionally good crop prospects, we had already in the month of October commenced the purchase of silver and the coinage of rupees, and when the crisis came we had considerable stocks of bullion both in the mints and in course of delivery from England, while further parcels were under orders. I think that it is not sufficiently recognized by the banking and commercial community that a low stock of rupees in the currency reserve, which might give some reasonable cause for apprehension in the absence of preparations for a rapid increase should necessity arise, is not an indication of danger when such preparations have been made as on the present occasion. Danger point when there has been no provision and no preparation is not danger point when all due precautions have been taken to meet a strain.

23. In connection with the large coinage during the last few months I think I should take this opportunity of expressing my warm appreciation of the manner in which the mint masters, and all those responsible for the conduct of minting operations, have worked to satisfy public requirements and to maintain the high reputation of the mint staff. Work at the mints is conducted under many difficulties, owing to the fact that when coinage operations were resumed some four years ago, after a long period of comparative idleness, the machinery and appliances were found to be in many respects inadequate and unsuitable to meet the strain of very much work. Proposals have been under consideration for the establishment of a combined mint with new machinery, and with all the latest improvements, but various objections have been raised to the scheme, and meanwhile the mint staff are to be congratulated on their success in coping with the difficulties arising from the imperfections of existing arrangements.

24. Large as was the sale of council drafts during the year 1902–3 the amount has been very greatly exceeded during the current year. It has already reached £22,592,900; and it is estimated that it will attain the altogether phenomenal figure of £23,700,000; and in addition to this quite abnormally large sale of council bills the imports of gold up to the end of February reached a figure approximating 12 millions sterling.

The secretary of state, by his drawings, and the government of India, by measures taken locally, have done all in their power to meet the demands of trade. The question of how this should best be done has been, and is likely still further to be, a matter for some discussion; here I would only say that I adhere to my opinion that it is impossible to admit the direct responsibility of government to immediately and in all circumstances meet abnormal demands. Government has every right to expect that those who make it their special business and derive a profit from financing the trade of the country will consider beforehand what are likely to be their requirements, and make due preparation to meet the wants of their customers. We, on our side, will do all we can, and it is our intention, in view of a probably permanent increase in demands for rupees during the winter season, to increase the standard of the stock of silver coin which it has hitherto been considered sufficient to hold in the currency reserve at the beginning of October, and further, to take permanent measures to enable a rapid addition to be made to that stock without the risk of delay in importing silver bullion for coinage.

As regards the events of the last few months I may point out that opinions in the most competent financial circles in India were by no means unanimous in anticipating the great demand for coin which arose. As late as December 15 none of the presidency banks had found it necessary to raise their rate above 4 per cent, and this rate is primarily dependent on the rates at which money is being offered in the open market; by January 5 all the presidency banks had, however, been obliged to raise rates to 6 per cent. This very rapid rise does not appear from the figures before us to have been in any way due to low balances held by the presidency banks at the beginning of the period of pressure. It was caused by the extraordinary trade demands which the presidency banks alone appear to have been in a position to satisfy, and I have not heard of any case in which accommodation was refused to regular customers when good security was forthcoming. Similarly, Government showed no hesitation throughout the crisis in exchanging gold and notes for rupees when demanded. I must insist on the fact that the currency reserve is maintained for the purpose of securing the stability of the note circulation and exchanging sovereigns, and as long as all obligations in this respect are fulfilled the public have no claim to further assistance from its resources.

25. During the year the gold reserve fund has increased from £3,810,730 to £6,382,200, of which amount £6,376,500 are invested in consols, the national war loan, and local loans stocks. In addition to these resources the last returns show a sum of £10,494,556 held in gold in the currency reserve.

26. Our exchange operations, as indicated by the rates obtained for council bills, have naturally been very favorable during the closing year. The estimated average exchange rate for the rupee for 1903–4 is 16.053d. as compared with the rates noted below for the four preceding years:

	Pence.
1899–1900	16.067
1900–1901	15.973
1901–2	15.987
1902–3	16.002
1903–4 (estimated)	16.053

5. STABILITY IN PRICE OF SILVER.

[Letter from chairman of English commission.]

9 THROGMORTON AVENUE,
London, E. C., October 4, 1904.

DEAR MR. HANNA: With reference to your letter of July 16, I have now the pleasure to send you a statement showing the purchases of silver made by the government of India since March 6, 1900, which I hope will give you the information which you desire to have. I think you will observe from the prices which the secretary of state for India paid for the silver which he bought that regularity has, as far as possible, been observed, so as to prevent extreme fluctuations.

Considering that the value of the silver bought by the secretary of state since March 6, 1900, up to the end of September, 1904, has amounted to 12 millions sterling, the variation in prices has, I think you will see, been extremely small.

I should mention that the figures given regarding the first and second purchase differ slightly from those published on page 356 in the report of the Commission on International Exchange, which included not only the bank's charges, as stated in the report, but also freight and charges incurred in carriage to India and brokerage in London. The figures given in the memorandum sent herewith represent in all cases only the sums paid by the bullion brokers for the silver.

With kind regards, I am, yours sincerely,

JAS. L. MACKAY.

H. H. HANNA, Esq., *Chairman*,
Commission on International Exchange of the United States of America, Indianapolis, Ind., U. S. A.

SILVER PURCHASED IN LONDON FOR THE GOVERNMENT OF INDIA.

First purchase.—50,297,224 ounces of silver were purchased between March 6, 1900, and March 20, 1901, at a cost exclusive of charges made by the Bank of England and of brokerage and minor charges, of £6,002,816.12.1, i. e., $28\frac{41}{64}$d. per ounce.

The average price per ounce of each installment was as follows:

Installment.	Date of purchase.	Sterling value of silver. £	s.	d.	Number of ounces.	Average price per ounce. Pence.
First	Mar. 6 to Mar. 24, 1900	500,189	11	3	4,348,001	27[illegible]
Second	Apr. 23 to May 4, 1900	500,222	7	5	4,360,345	27[illegible]
Third	May 14 to May 28, 1900	500,034	6	9	4,347,934	27[illegible]
Fourth	June 12 to June 22, 1900	400,098	8	8	3,456,628	27[illegible]
Fifth	Sept. 5 to Sept. 17, 1900	500,296	5	0	4,160,[illegible]	28[illegible]
Sixth	Sept. 27 to Oct. 8, 1900	500,216	5	4	4,067,293	29[illegible]
Seventh	Oct. 20 to Oct. 25, 1900	500,223	1	2	3,983,953	30[illegible]
Eighth	Nov. 28 to Dec. 7, 1900	500,245	11	11	4,028,510	29[illegible]
Ninth	Dec. 19 1900, to Jan. 4, 1901	500,218	11	2	4,059,913	29[illegible]
Tenth	Jan. 8, to Jan. 28, 1901	500,158	12	4	4,125,234	29[illegible]
Eleventh	Jan. 29 to Feb. 22, 1901	500,269	11	4	4,247,677	28[illegible]
Twelfth	Feb. 26 to Mar. 20, 1901	600,643	19	9	5,110,873	28[illegible]
Total		6,002,816	12	1	50,297,224	28[illegible]

Second purchase.—3,188,890 ounces were purchased between February 28 and March 13, 1903, at a cost, exclusive of the bank's charges and of brokerage and minor charges, of £300,315.1.3, i. e., 22[illegible]d. per ounce.

Third purchase.—35,652,935 ounces were purchased between September 15, 1903, and February 20, 1904, at a cost, exclusive of the bank's charges and of brokerage and minor charges, of £4,000,788.11.9, i. e., $26\frac{59}{64}$d. per ounce.

The average price per ounce of each installment was as follows:

Installment.	Date of purchase.	Sterling value of silver. £	s.	d.	Number of ounces.	Value per ounce. Pence.
First	Sept. 15 to Oct. 2, 1903	500,109	14	9	4,406,654	27[illegible]
Second	Oct. 9 to Oct. 26, 1903	500,087	6	6	4,262,018	28[illegible]
Third	Nov. 12 to Nov. 24, 1903	500,122	16	8	4,431,780	27[illegible]
Fourth	Dec. 12 to Dec. 19, 1903	500,109	6	9	4,667,608	25[illegible]
Fifth	Dec. 21, 1903, to Jan. 4, 1904	500,093	15	5	4,620,610	27[illegible]
Sixth	Jan. 5 to Jan. 11, 1904	500,116	8	7	4,475,009	26[illegible]
Seventh	Jan. 11 to Jan. 16, 1904	500,094	11	11	4,406,348	27[illegible]
Eighth	Feb. 15 to Feb. 20, 1904	500,054	11	2	4,382,908	27[illegible]
Total		4,000,788	11	9	35,652,935	26[illegible]

Fourth purchase.—18,300,644 ounces have been purchased between May 2 and August 27 at a cost, exclusive of the bank's charge and of brokerage and minor charges, of £2,000,407.13.10.

The average price per ounce of each installment has been as follows:

Installment.	Date of purchase.	Sterling value of silver.	Number of ounces.	Value per ounce.
		£ s. d.		*Pence.*
First	May 2 to May 20, 1904	500,220 2 5	4,685,849	25[illegible]
Second	May 25 to July 4, 1904	500,062 2 10	4,594,016	26[illegible]
Third	July 4 to July 20, 1904	499,982 8 8	4,523,947	26[illegible]
Fourth	July 28 to Aug. 27, 1904	500,142 19 11	4,496,834	26[illegible]
Total		2,000,407 13 10	18,300,644	26[illegible]

6. PIXLEY & ABELL'S ANNUAL CIRCULAR, 1904.

Gold.—Excepting during June, July, and August, the continental demand prevented any purchases of bars by the Bank of England.

Early in the year Paris bought largely and continued to do so until June. Our own market not being able to satisfy requirements, considerable shipments were made from New York direct. In August Berlin became a keen buyer, presumably on Russian account, and at one time as much as 78s. ¼d. was freely paid. Sovereigns were also taken from the bank, as it paid to take them at these rates. This demand for gold continued until the end of the year.

Egypt in the latter part of the year was a heavy importer of sovereigns, and, in addition, part of the coin shipped from Bombay was stopped there en route to London.

The South African production showed a steady increase and gave a total for the year of £16,000,000, as compared with £13,800,000 last year and £15,800,000 in 1898, the best total previously.

The India council shipped heavy sums to London, part of which was allocated to the purchase of silver, and the large increase in the export figures to England may be attributed to this cause.

West Africa showed a further advance, but not nearly in the same proportion as the previous year.

Heavy sums were sent repeatedly to the Argentine Republic, particularly during the last few months.

The bank rate stood at 4 per cent on January 1, and was lowered to 3½ per cent on April 14 and to 3 per cent on April 21. It remained at this for the rest of the year, giving an average of 3.296 per cent.

Silver.—The predominating feature of the year has again been the large purchases made on behalf of the Indian government. These carried the price early in the year to over 27d., and when these orders temporarily ceased the price did not greatly fall, as cash silver remained scarce, owing to covering orders by "shorts." Some anxiety was caused by the partial failure of the monsoon, especially in Gujerat, but later this was removed, and it soon became evident that Indian trade would require more silver currency than the stock possessed by the government. Fairly good bazar orders, interspersed with French mint tenders totaling 77,500 kilograms, never allowed the market to fall lower than 24$\frac{7}{16}$d. (in April), and the price quickly recovered to 26d. In August the Indian government orders recom-

menced, and, with occasional pauses, these continued to the end of the year.

Sales by China had at times a somewhat flattening effect, but this was more than compensated for by the falling off of the American supply, owing to the requirements for the new Panama coinage, which absorbed about 1,500,000 ounces. The forward price, under pressure of bear sales, showed a wide difference early in the year, but closed up to within a fraction of cash in April. In September renewed forward sales again caused the difference to widen, and from then this averaged about ½d. till the close of the year.

In November the Mexican Congress passed a bill closing the mints to the free coinage of silver, with a view to gradually raising the value of the Mexican dollar to half that of the United States dollar. So far this measure has had no influence on the price of silver.

The war in the Far East has led to a large demand for silver, both in Shanghai, where considerable purchases have been made, and also in San Francisco for Mexican dollars.

The Spanish Government toward the close of the year sold 17,500 kilograms of surplus silver.

The average price for the year is 26⅜d.

Mexican dollars.—Large amounts continued to be shipped here from the Straits, but ceased before the end of January. Further importations of the coin into Manila were stopped on January 14. Japan bought large quantities in San Francisco, but, as a rule, the quotation here remained more or less nominal until October, when further shipments were made from China to London.

On the announcement of the passing of a bill in Mexico placing the dollar on a fixed basis, the price rose to 27d., and all the dollars that were available here were at once shipped to Mexico to take advantage of the premium obtainable over their intrinsic value. From January 1, 1905, an import duty of 10 Mexican dollars per kilogram has been placed on all dollars sent into the country. It is proposed by the Mexican Government to coin the dollars of the same weight and fineness as before, and, further, to coin dollars for export as required.

PIXLEY & ABELL, *Bullion Brokers.*

LONDON, *December 31, 1904.*

APPENDIX G.

STATISTICAL DATA.

Production of gold and silver in the world since the discovery of America.

[From 1493 to 1885 is from a table of averages for certain periods, compiled by Dr. Adolph Soetbeer. For the year 1886 and since the production is the annual estimate of the Bureau of the Mint.]

Period.	Gold.			
	Average annual for period.		Total for period.	
	Fine ounces.	Value.	Fine ounces.	Value.
1493-1520	186,470	$3,855,000	5,221,160	$107,931,000
1521-1544	230,194	4,759,000	5,524,656	114,205,000
1545-1560	273,596	5,656,000	4,377,544	90,492,000
1561-1580	219,906	4,546,000	4,398,120	90,917,000
1581-1600	237,267	4,905,000	4,745,340	98,095,000
1601-1620	273,918	5,662,000	5,478,360	113,248,000
1621-1640	266,845	5,516,000	5,336,900	110,324,000
1641-1660	281,955	5,828,000	5,639,110	116,571,000
1661-1680	297,709	6,154,000	5,954,180	123,084,000
1681-1700	346,095	7,154,000	6,921,895	143,088,000
1701-1720	412,163	8,520,000	8,243,260	170,403,000
1721-1740	613,422	12,681,000	12,268,440	253,611,000
1741-1760	791,211	16,356,000	15,824,230	327,116,000
1761-1780	665,666	13,761,000	13,313,315	275,211,000
1781-1800	571,948	11,823,000	11,438,970	236,464,000
1801-1810	571,563	11,815,000	5,715,627	118,152,000
1811-1820	367,957	7,606,000	3,679,568	76,063,000
1821-1830	457,044	9,448,000	4,570,444	94,479,000
1831-1840	652,291	13,484,000	6,522,913	134,841,000
1841-1850	1,760,502	36,393,000	17,605,018	363,928,000
1851-1855	6,410,324	132,513,000	32,051,621	662,566,000
1856-1860	6,486,262	134,083,000	32,431,312	670,415,000
1861-1865	5,949,582	122,989,000	29,747,913	614,944,000
1866-1870	6,270,086	129,614,000	31,350,430	648,071,000
1871-1875	5,591,014	115,577,000	27,955,068	577,883,000
1876-1880	5,543,110	114,586,000	27,715,550	572,931,000
1881-1885	4,794,755	99,116,000	23,973,773	495,582,000
1886-1890	5,461,282	112,895,000	27,306,411	564,474,000
1891-1895	7,882,565	162,947,000	39,412,823	814,736,000
1896	9,783,914	202,251,600	9,783,914	202,251,600
1897	11,420,068	236,073,700	11,420,068	236,073,700
1898	13,877,806	286,879,700	13,877,806	286,879,700
1899	14,837,775	306,724,100	14,837,775	306,724,100
1900	12,315,135	254,576,300	12,315,135	254,576,300
1901	12,625,527	260,992,900	12,625,527	260,992,900
1902	14,321,360	296,048,800	14,321,360	296,048,800
1903	15,747,378	325,527,200	15,747,378	325,527,200
Total	....	....	529,652,914	10,948,899,300

Period.	Silver.			
	Annual average for period.		Total for period.	
	Fine ounces.	Coining value.	Fine ounces.	Coining value.
1493-1520	1,511,050	$1,954,000	42,309,400	$54,703,000
1521-1544	2,899,930	3,740,000	69,598,320	89,986,000
1545-1560	10,017,940	12,952,000	160,287,040	207,240,000
1561-1580	9,628,925	12,450,000	192,578,500	248,990,000
1581-1600	13,467,635	17,413,000	269,352,700	348,254,000
1601-1620	13,596,235	17,579,000	271,924,700	351,579,000
1621-1640	12,654,240	16,361,000	253,084,800	327,221,000
1641-1660	11,776,545	15,226,000	235,530,900	304,525,000
1661-1680	10,834,550	14,008,000	216,691,000	280,106,000
1681-1700	10,992,085	14,212,000	219,841,700	284,240,000
1701-1720	11,432,540	14,781,000	228,650,800	295,629,000

Production of gold and silver in the world, etc.—Continued.

Period.	Silver.			
	Annual average for period.		Total for period.	
	Fine ounces.	Coining value.	Fine ounces.	Coining value.
1721-1740	13,863,080	$17,924,000	277,261,600	$358,480,000
1741-1760	17,140,612	22,162,000	342,812,235	443,232,000
1761-1780	20,985,591	27,133,000	419,711,820	542,658,000
1781-1800	28,261,779	36,540,000	565,235,580	730,810,000
1801-1810	28,746,922	37,168,000	287,469,225	371,677,000
1811-1820	17,385,755	22,479,000	173,857,555	224,780,000
1821-1830	14,807,004	19,144,000	148,070,040	191,444,000
1831-1840	19,175,867	24,793,000	191,758,675	247,930,000
1841-1850	25,090,342	32,440,000	250,903,422	324,400,000
1851-1855	28,488,597	36,824,000	142,442,986	184,169,000
1856-1860	29,095,428	37,618,000	145,477,142	188,092,000
1861-1865	35,401,972	45,772,000	177,009,862	228,861,000
1866-1870	43,051,583	55,663,000	215,257,914	278,313,000
1871-1875	63,317,014	81,864,000	316,585,069	409,322,000
1876-1880	78,775,602	101,851,000	393,878,009	509,256,000
1881-1885	92,003,944	118,955,000	460,019,722	594,773,000
1886-1890	108,911,431	140,815,000	544,557,155	704,074,000
1891-1895	157,581,331	203,742,000	787,906,656	1,018,708,000
1896	157,061,370	203,069,200	157,061,370	203,069,200
1897	160,421,082	207,413,000	160,421,082	207,413,000
1898	169,055,253	218,576,800	169,055,253	218,576,800
1899	168,337,453	217,648,200	168,337,453	217,648,200
1900	173,591,364	224,441,200	173,591,364	224,441,200
1901	173,011,283	223,691,300	173,011,283	223,691,300
1902	161,334,339	208,594,000	161,334,339	208,594,000
1903	170,443,670	220,371,600	170,443,670	220,371,600
Total			9,333,320,341	12,067,323,300

Period.	Percentage of production.			
	By weight.		By value.	
	Gold.	Silver.	Gold.	Silver.
1493-1520	11	89	66.4	33.6
1521-1544	7.4	92.6	55.9	44.1
1545-1560	2.7	97.3	30.4	69.6
1561-1580	2.2	97.8	26.7	73.3
1581-1600	1.7	98.3	22	78
1601-1620	2	98	24.4	75.6
1621-1640	2.1	97.9	25.2	74.8
1641-1660	2.3	97.7	27.7	72.3
1661-1680	2.7	97.3	30.5	69.5
1681-1700	3.1	96.9	33.5	66.5
1701-1720	3.5	96.5	36.6	63.4
1721-1740	4.2	95.8	41.4	58.6
1741-1760	4.4	95.6	42.5	57.5
1761-1780	3.1	96.9	33.7	66.3
1781-1800	2	98	24.4	75.6
1801-1810	1.9	98.1	24.1	75.9
1811-1820	2.1	97.9	25.3	74.7
1821-1830	3	97	33	67
1831-1840	3.3	96.7	35.2	64.8
1841-1850	6.6	93.4	52.9	47.1
1851-1855	18.4	81.6	78.3	21.7
1856-1860	18.2	81.8	78.1	21.9
1861-1865	14.4	85.6	72.9	27.1
1866-1870	12.7	87.3	70	30
1871-1875	8.1	91.9	58.5	41.5
1876-1880	6.6	93.4	53	47
1881-1885	5	95	45.5	54.5
1886-1890	4.8	95.2	44.5	55.5
1891-1895	4.8	95.2	44.4	55.6
1896	5.9	94.1	49.9	50.1
1897	6.7	93.3	53.2	46.8
1898	7.6	92.4	56.8	43.2
1899	8.1	91.9	58.5	41.5
1900	6.6	93.4	53.2	46.8
1901	6.8	93.2	52.7	47.3
1902	8.2	91.8	58.7	41.3
1903	8.5	91.5	59.6	40.4
Total	5.4	94.6	47.6	52.4

World's production of gold and silver for calendar years 1900, 1901, 1902, and 1903.

Country.	1900.						
	Gold.			Silver.			
	Kilograms (fine).	Ounces (fine).	Value.	Kilograms (fine).	Ounces (fine).	Coining value.	Commercial value.
North America:							
United States	119,126	3,829,897	$79,171,000	1,793,395	57,647,000	$74,533,500	$35,741,100
Mexico	13,542	435,375	*a* 9,000,000	1,786,887	57,437,898	74,263,000	35,611,400
Canada	41,951	1,348,720	27,880,500	138,400	4,448,755	5,751,900	2,758,200
Africa	13,018	419,503	8,671,900	....	....	....	....
Australasia	110,591	3,555,506	73,498,900	415,014	13,340,263	17,248,000	8,271,000
Europe:							
Russia	30,312	974,537	20,145,500	4,458	143,299	185,300	88,800
Austria-Hungary	3,223	103,615	2,141,900	61,871	1,988,774	2,571,300	1,233,000
Germany	99	3,192	66,000	168,350	5,411,441	6,996,600	3,355,100
Norway	....	....	....	5,377	172,839	223,500	107,200
Sweden	88	2,845	58,800	1,928	61,983	80,100	38,400
Italy	53	1,704	35,200	23,374	751,335	971,400	465,800
Spain	13	418	8,600	99,095	3,185,316	4,118,400	1,974,900
Portugal	3	83	1,700	*c* 119	3,790	4,900	2,300
Greece	....	....	....	31,472	1,011,656	1,308,000	627,200
Turkey	*c* 21	675	14,000	*c* 4,422	142,141	183,800	88,100
Finland	*b* 3	84	1,700	*b* 244	7,843	10,100	4,900
France	....	....	....	14,067	452,151	584,600	280,300
Great Britain	415	13,360	276,200	6,896	221,673	286,600	137,400
South America:							
Argentina	66	2,112	43,700	1,178	37,898	49,000	23,500
Bolivia	180	5,786	119,600	341,295	10,970,610	14,184,200	6,801,800
Chile	2,449	78,735	1,627,600	*b* 129,503	4,162,718	5,382,100	2,580,900
Colombia	1,798	57,804	1,194,900	57,994	1,864,165	2,410,200	1,155,800
Ecuador	162	5,208	107,700	240	7,734	*a* 10,000	4,800
Brazil	4,176	134,260	2,775,400	....	....	....	....
Venezuela	483	15,538	321,200	....	....	....	....
Guiana (British)	3,063	98,487	2,035,900	....	....	....	....
Guiana (Dutch)	698	22,439	463,800	....	....	....	....
Guiana (French)	2,378	76,468	1,580,700	....	....	....	....
Peru	1,633	52,498	1,085,200	226,973	7,295,825	9,433,000	4,523,400
Uruguay	46	1,492	30,800	25	800	1,000	500
Central America	752	24,188	500,000	31,523	1,013,285	1,310,100	628,200
Asia:							
Japan	1,808	58,127	1,201,600	53,809	1,729,603	2,236,300	1,072,400
China	8,387	269,662	*b* 5,574,400	....	....	....	....
Korea	6,771	217,687	4,500,000	....	....	....	....
India (British)	14,197	456,444	9,435,500	....	....	....	....
East Indies (British)	860	27,643	571,400	....	....	....	....
East Indies (Dutch)	654	21,043	435,000	2,509	80,659	104,300	50,000
Total	383,049	12,315,135	254,576,300	5,400,418	173,591,364	224,441,200	107,626,400

Country.	1901.						
	Gold.			Silver.			
	Kilograms (fine).	Ounces (fine).	Value.	Kilograms (fine).	Ounces (fine).	Coining value.	Commercial value.
North America:							
United States	118,367	3,805,500	$78,666,700	1,717,705	55,214,000	$71,387,800	$33,128,400
Mexico	15,475	497,527	10,284,800	1,793,692	57,656,549	74,545,900	34,593,900
Canada	36,305	1,167,216	24,128,500	163,099	5,242,697	6,778,400	3,145,600
Africa	13,677	439,704	9,089,500	....	....	....	....
Australasia	115,679	3,719,080	76,880,200	318,256	10,230,046	13,226,700	6,138,000
Europe:							
Russia	34,383	1,105,412	22,850,900	4,884	156,993	203,000	94,200
Austria-Hungary	3,215	103,363	2,136,700	62,118	1,996,706	2,581,600	1,198,000
Germany	90	2,893	59,800	171,778	5,521,648	7,139,100	3,313,000
Norway	....	....	....	5,161	165,902	214,500	99,500
Sweden	63	2,017	41,700	1,680	53,986	69,800	32,400
Italy	8	257	5,300	30,000	964,333	1,246,800	578,600
Spain	*a* 13	418	8,600	99,095	3,185,316	4,118,400	1,911,200
Portugal	2	63	1,300	*a* 119	3,790	4,900	2,300
Greece	....	....	....	35,902	1,154,046	1,492,100	692,400
Turkey	37	1,185	24,500	13,352	429,180	554,900	257,500
Finland	2	63	1,300	*a* 244	7,843	10,100	4,700
France	....	....	....	11,954	384,263	496,800	230,600
Great Britain	175	5,626	116,300	5,392	173,297	224,100	104,000
South America:							
Argentina	45	1,451	30,000	1,405	45,166	58,400	27,100
Bolivia	180	5,786	119,600	404,201	12,992,695	16,798,600	7,795,600

a Estimate Bureau of the Mint. *b* Figures for 1899 repeated. *c* Figures for 1898 repeated.

World's production of gold and silver, etc.—Continued.

Country.	1901. Gold. Kilograms (fine).	Gold. Ounces (fine).	Gold. Value.	Silver. Kilograms (fine).	Silver. Ounces (fine).	Silver. Coining value.	Silver. Commercial value.
South America—Con.							
Chile	1,606	51,626	$1,067,200	287,926	9,255,130	$11,966,200	$5,553,100
Colombia	4,215	135,513	2,801,300	58,537	1,881,649	2,432,800	1,129,000
Ecuador	165	5,321	110,000	a 240	7,734	10,000	4,600
Brazil	4,176	134,260	2,775,400	.....	.....	.....	.....
Venezuela	483	15,538	321,200	.....	.....	.....	.....
Guiana (British)	2,666	85,701	1,771,600	.....	.....	.....	.....
Guiana (Dutch)	610	19,621	405,600	.....	.....	.....	.....
Guiana (French)	3,009	96,750	2,000,000	.....	.....	.....	.....
Peru	865	27,825	575,200	110,965	3,566,868	4,611,700	2,140,100
Uruguay	47	1,530	31,700	a 25	800	1,000	500
Central America	963	30,974	640,300	27,365	879,666	1,137,400	527,800
Asia:							
Japan	1,808	58,127	1,201,600	a 53,809	1,729,603	2,236,300	1,037,800
China	13,680	439,801	9,091,500	.....	.....	.....	.....
Korea	4,514	145,125	3,000,000	.....	.....	.....	.....
India (British)	14,138	454,527	9,395,900	.....	.....	.....	.....
East Indies (British)	1,296	41,685	861,700	.....	.....	.....	.....
East Indies (Dutch)	748	24,042	497,000	3,465	111,377	144,000	66,800
Total	392,705	12,625,527	260,992,900	5,382,369	173,011,283	223,691,300	103,806,700

Country.	1902. Gold. Kilograms (fine).	Gold. Ounces (fine).	Gold. Value.	Silver. Kilograms (fine).	Silver. Ounces (fine).	Silver. Coining value.	Silver. Commercial value.
North America:							
United States	120,373	3,870,000	$80,000,000	1,726,603	55,500,000	$71,757,600	$29,415,000
Mexico	15,279	491,156	10,153,100	1,872,091	60,176,604	77,804,100	31,893,600
Canada	32,105	1,032,161	21,336,700	131,387	4,223,304	5,460,400	2,238,300
Africa	58,716	1,887,773	39,023,700	.....	.....	.....	.....
Australasia	122,749	3,946,374	81,578,800	249,690	8,026,037	10,377,100	4,253,800
Europe:							
Russia	33,905	1,090,053	22,533,400	4,937	158,679	205,200	84,100
Austria-Hungary	3,267	105,037	2,171,300	58,523	1,881,132	2,432,200	997,000
Germany	94	3,023	62,500	178,032	5,722,641	7,399,000	3,033,000
Norway	3	97	2,000	6,422	206,413	266,900	109,400
Sweden	94	3,023	62,500	1,439	46,226	59,800	24,500
Italy	8	257	5,300	30,000	964,339	1,246,800	511,100
Spain	15	491	10,200	115,113	3,700,189	4,784,100	1,961,100
Portugal	2	63	1,300	118	3,773	4,900	2,000
Greece	.....	.....	.....	33,044	1,062,177	1,373,300	563,000
Turkey	46	1,480	30,600	14,949	480,566	621,300	254,700
Finland	2	63	1,300	269	8,679	11,200	4,600
France	.....	.....	.....	23,250	747,359	966,300	396,100
Great Britain	116	3,737	77,300	4,551	146,289	189,200	77,500
South America:							
Argentina	45	1,451	30,000	1,174	37,720	48,800	20,000
Bolivia	2	48	1,000	279,044	8,969,596	11,597,100	4,753,900
Chile	1,003	32,262	666,900	54,047	1,737,300	2,246,200	920,800
Colombia	3,796	122,031	2,522,600	55,269	1,776,604	2,297,000	911,600
Ecuador	301	9,675	200,000	240	7,736	10,000	4,100
Brazil	3,159	101,584	2,099,900	.....	.....	.....	.....
Venezuela	653	20,985	433,800	58	1,887	2,400	1,000
Guiana (British)	2,721	87,491	1,808,600	.....	.....	.....	.....
Guiana (Dutch)	484	15,577	322,000	.....	.....	.....	.....
Guiana (French)	3,642	117,077	2,420,200	.....	.....	.....	.....
Peru	3,500	112,525	2,326,100	132,668	4,264,528	5,513,700	2,260,200
Uruguay	87	2,796	57,800	24	755	1,000	400
Central America	3,012	96,842	2,001,900	30,217	971,320	1,255,800	514,800
Asia:							
Japan	1,936	62,259	1,287,000	12,151	390,567	505,000	207,000
China	13,138	422,401	8,731,800	.....	.....	.....	.....
Korea	4,514	145,125	3,000,000	.....	.....	.....	.....
India (British)	14,428	463,824	9,588,100	.....	.....	.....	.....
East Indies (British)	1,545	49,686	1,027,100	.....	.....	.....	.....
East Indies (Dutch)	713	22,930	474,000	3,793	121,919	157,600	61,000
Total	445,453	14,321,360	296,048,800	5,019,103	161,334,339	208,594,000	85,707,200

World's production of gold and silver, etc.—Continued.

Country.	1903.						
	Gold.			Silver.			
	Kilograms (fine).	Ounces (fine).	Value.	Kilograms (fine).	Ounces (fine).	Coining value.	Commercial value
North America:							
United States	110,731	3,560,000	$73,591,700	1,689,270	54,300,000	$70,206,000	$29,322,000
Mexico	16,066	516,524	10,677,500	2,193,249	70,499,942	91,151,400	38,070,000
Canada	28,340	911,118	18,834,500	97,984	3,149,591	4,072,200	1,700,800
Africa	102,314	3,289,409	67,998,100	10,677	343,214	443,800	185,300
Australasia	134,231	4,315,538	89,210,100	301,233	9,682,856	12,519,300	5,228,700
Europe:							
Russia	37,063	1,191,582	24,632,200	4,724	151,835	196,300	82,000
Austria-Hungary	3,378	108,609	2,245,100	50,524	1,624,048	2,099,800	877,000
Germany	106	3,412	70,500	181,136	5,822,452	7,528,000	3,144,100
Norway	4	129	2,700	6,158	197,928	255,900	106,900
Sweden	51	1,640	33,900	1,061	34,117	44,100	18,406
Italy	40	1,291	26,700	25,085	806,335	1,042,500	435,400
Spain	8	262	5,400	127,267	4,090,876	5,289,200	2,209,100
Portugal	2	63	1,300				
Greece				33,044	1,062,177	1,373,300	573,600
Turkey	31	999	20,700	14,274	458,830	593,200	247,800
Finland	3	96	2,000	299	9,618	12,400	5,200
France				23,250	747,359	966,300	403,600
Great Britain	116	3,737	77,300	4,551	146,289	189,200	79,000
South America:							
Argentina	45	1,451	30,000	2,880	92,592	119,700	50,000
Bolivia	2	48	1,000	279,044	8,969,596	11,597,100	4,843,600
Chile	1,004	32,262	666,900	80,804	2,597,355	3,358,200	1,402,600
Colombia	4,100	131,795	2,724,400	35,117	1,128,799	1,459,500	609,500
Ecuador	413	13,272	274,400				
Brazil	3,422	110,016	2,274,200				
Venezuela	127	4,087	84,500				
Guiana (British)	2,424	77,948	1,611,300				
Guiana (Dutch)	566	18,183	375,900				
Guiana (French)	3,162	101,658	2,101,500				
Peru	892	28,669	592,600	54,339	1,746,674	2,258,300	943,200
Uruguay	77	2,491	51,500				
Central America	2,822	90,716	1,875,300	65,831	2,116,063	2,735,900	1,142,700
Asia:							
Japan	3,013	56,881	2,002,700	16,875	542,428	701,300	292,900
China	11,021	354,334	7,324,700				
Korea	4,514	145,125	3,000,000				
India (British)	17,197	552,873	11,428,900				
East Indies (British)	1,770	56,899	1,176,200				
Esst Indies (Dutch)	755	24,261	501,500	3,817	122,696	158,700	66,200
Total	489,810	15,747,378	325,527,200	5,302,493	170,443,670	220,371,600	92,039,600

Highest, lowest, and average price of bar silver in London, per ounce British standard (0.925), since 1833, and the equivalent in United States gold coin of an ounce 1,000 fine, taken at the average price.

Calendar years.	Highest quotation.	Lowest quotation.	Average quotation.	Value of a fine ounce at average quotation.	Calendar years.	Highest quotation.	Lowest quotation.	Average quotation.	Value of a fine ounce at average quotation.
	d.	d.	d.			d.	d.	d.	
1833	59 7/8	58 3/4	59 9/16	$1.297	1869	61	60	60 7/16	$1.325
1834	60 3/4	59 3/4	59 15/16	1.313	1870	60 3/4	60 1/4	60 9/16	1.328
1835	60	59 1/4	59 11/16	1.308	1871	61	60 3/16	60 1/2	1.326
1836	60 3/8	59 3/8	60	1.315	1872	61 1/8	59 1/4	60 5/16	1.322
1837	60 3/8	59	59 9/16	1.305	1873	59 15/16	57 7/8	59 3/16	1.29769
1838	60 1/8	59 1/2	59 1/2	1.304	1874	59 1/2	57 1/4	58 5/16	1.27883
1839	60 5/8	60	60 3/8	1.323	1875	57 5/8	55 1/2	56 13/16	1.24233
1840	60 3/4	60 1/8	60 3/8	1.323	1876	58 1/2	46 3/4	53 1/16	1.16414
1841	60 3/8	59 3/4	60 1/16	1.316	1877	58 1/4	53 1/4	54 13/16	1.20189
1842	60	59 1/4	59 7/16	1.303	1878	55 1/4	49 1/2	52 9/16	1.15358
1843	59 3/4	59	59 3/16	1.297	1879	53 3/4	48 7/8	51 1/4	1.12392
1844	59 3/4	59 1/4	59 1/2	1.304	1880	52 13/16	51 1/2	52 1/4	1.14507
1845	59 7/8	58 7/8	59 1/4	1.298	1881	52 7/8	50 7/8	51 5/8	1.13229
1846	60 1/8	59	59 5/16	1.300	1882	52 3/8	50	51 13/16	1.13562
1847	60 3/8	58 7/8	59 11/16	1.308	1883	51 3/16	50 1/16	50 9/16	1.10874
1848	60	58 1/2	59 1/2	1.304	1884	51 3/8	49 1/2	50 5/8	1.11068
1849	60	59 1/2	59 3/4	1.309	1885	50	46 7/8	48 9/16	1.06510
1850	61 1/2	59 1/2	61 1/16	1.316	1886	47	42	45 3/8	.99467
1851	61 3/8	60	61	1.337	1887	47 1/2	43 1/4	44 5/8	.97946
1852	61 7/8	59 7/8	60 1/2	1.326	1888	44 9/16	41 5/8	42 7/8	.93974
1853	61 7/8	60 3/8	61 1/2	1.348	1889	44 3/8	41 15/16	42 11/16	.93511
1854	61 7/8	60 7/8	61 1/2	1.348	1890	54 5/8	43 5/8	47 3/4	1.04634
1855	61 5/8	60	61 5/16	1.344	1891	48 3/4	43 1/2	45 1/16	.98800
1856	62 1/4	60 1/2	61 5/16	1.344	1892	43 3/4	37 7/8	39 3/4	.87145
1857	62 3/8	61	61 3/4	1.353	1893	38 3/4	30 1/2	35 9/16	.78030
1858	61 7/8	60 3/4	61 5/16	1.344	1894	31 3/4	27	28 15/16	.63479
1859	62 3/4	61 3/4	62 1/16	1.360	1895	31 3/8	27 3/16	29 13/16	.65406
1860	62 3/8	61 1/4	61 11/16	1.352	1896	31 15/16	29 3/4	30 13/16	.67565
1861	61 3/8	60 1/8	60 13/16	1.333	1897	29 13/16	23 5/8	27 9/16	.60438
1862	62 1/8	61	61 7/16	1.346	1898	28 5/8	25	26 15/16	.59010
1863	61 3/4	61	61 3/8	1.345	1899	29	26 5/8	27 7/16	.60154
1864	62 1/2	60 5/8	61 3/8	1.345	1900	30 1/4	27	28 5/16	.62007
1865	61 5/8	60 1/2	61 1/16	1.338	1901	29 9/16	24 15/16	27 3/16	.59595
1866	62 1/4	60 3/8	61 1/8	1.339	1902	26 1/16	21 11/16	24 1/16	.52795
1867	61 1/4	60 5/8	60 9/16	1.328	1903	28 1/4	21 11/16	24 3/4	.54257
1868	61 1/8	60 1/8	60 1/2	1.326					

Highest, lowest, and average price of silver bullion and value of a fine ounce each month, during the calendar years 1900–1903.

Month.	Highest.	Lowest.	Average price per ounce British standard, 0.925.	Equivalent value of a fine ounce with exchange at par ($4.8665).	Average monthly price at New York of exchange on London.	Equivalent value of a fine ounce based on average monthly price and average rate of exchange.	Average monthly New York price of fine bar silver.
1900.	*Pence.*	*Pence.*	*Pence.*				
January	27 3/4	27	27.3088	$0.59864	$4.8725	$0.59938	$0.60226
February	27 3/4	27 5/16	27.4765	.60015	4.8748	.60346	.60602
March	27 13/16	27 7/16	27.5810	.60460	4.8591	.60363	.60611
April	27 1/2	27 5/16	27.4150	.60096	4.8756	.60208	.60395
May	27 3/4	27 3/8	27.5625	.60577	4.8806	.60619	.60682
June	28 9/16	27 9/16	27.8293	.61005	4.8696	.61043	.61120
July	28 9/16	27 3/4	28.2375	.61895	4.8712	.61957	.61935
August	28 7/16	27 15/16	28.2500	.61927	4.8786	.61839	.61865
September	29 1/4	28 7/16	28.8375	.63215	4.8689	.63285	.63343
October	30 1/4	29 1/4	29.5902	.64865	4.8432	.64551	.64935
November	29 15/16	29 7/16	29.6634	.65025	4.8470	.64760	.64296
December	29 15/16	29 1/2	29.6900	.65839	4.8488	.64849	.64775
Average	....	....	28.2868	.62007	4.8658	.61979	.62065
1901.							
January	29 9/16	27 3/4	28.9735	.63513	4.8724	.63582	.63485
February	28 7/16	27 7/8	28.1592	.61728	4.8780	.61858	.61693
March	28 1/4	27 5/16	27.9495	.61268	4.8778	.61422	.61336
April	27 15/16	26 15/16	27.2925	.59828	4.8817	.60014	.60033
May	27 5/8	27 3/16	27.4189	.60105	4.8815	.60366	.60394
June	27 5/8	27 1/4	27.4200	.60107	4.8820	.60298	.60335
July	27 1/4	26 13/16	26.9629	.59107	4.8752	.59209	.59423
August	27 1/4	26 3/4	26.9375	.59050	4.8731	.59130	.59217
September	27	26 7/8	26.9650	.59110	4.8485	.58949	.58978
October	26 7/8	26 3/8	26.6157	.58344	4.8623	.58294	.58356
November	26 1/4	25 3/4	26.0913	.57150	4.8752	.57360	.57400
December	25 3/4	24 15/16	25.4475	.55783	4.8698	.55820	.55790
Average	....	....	27.1861	.59595	4.8731	.59691	.59703
1902.							
January	26 1/16	25 1/4	25.6250	.56173	4.8716	.56231	.56302
February	25 5/8	25 5/16	25.4140	.55711	4.8749	.55806	.55833
March	25 7/16	24 13/16	25.0078	.54820	4.8773	.54938	.54923
April	24 7/8	23 5/16	24.3221	.53316	4.8788	.53449	.53452
May	24 1/4	23 5/16	23.6990	.51950	4.8731	.52021	.52000
June	24 7/16	23 15/16	24.1850	.53016	4.8764	.53122	.53085
July	24 7/16	24 3/16	24.3680	.53417	4.8800	.53566	.53152
August	24 7/16	24 3/16	24.2259	.53106	4.8748	.53197	.53250
September	24 1/4	23 9/16	23.8750	.52326	4.8603	.52270	.52269
October	23 13/16	23 1/4	23.4004	.51296	4.8626	.51255	.51162
November	23 1/4	21 15/16	22.6925	.49731	4.8714	.49758	.49705
December	22 3/4	21 13/16	22.2067	.48679	4.8701	.48694	.48653
Average	....	....	24.0851	.52795	4.8726	.52858	.52815
1903.							
January	22 3/8	21 11/16	21.9838	.48191	4.8689	.48214	.48213
February	22 5/16	21 7/8	22.1093	.48466	4.8753	.48553	.48479
March	22 15/16	22 1/4	22.5000	.49322	4.8702	.49359	.49355
April	25 1/16	22 5/8	23.3550	.51196	4.8718	.51253	.51255
May	25 1/4	24 5/16	24.8894	.54560	4.8813	.54709	.54775
June	24 9/16	24 1/4	24.3300	.53334	4.8779	.53457	.53519
July	25 5/8	24 1/4	24.8611	.54498	4.8675	.54509	.54500
August	26 3/4	25 5/16	25.6009	.56120	4.8582	.56025	.56076
September	27 9/16	26 1/4	26.7524	.58644	4.8635	.58608	.58605
October	28 1/4	27 7/16	27.8935	.61145	4.8564	.61064	.60963
November	27 3/4	26 1/4	27.0050	.59198	4.8396	.58898	.58745
Average (11 months)	....	....	24.6618	.54061	4.8664	.54059	.54044

Highest, lowest, and average value of a United States silver dollar, measured by the market price of silver, and the quantity of silver purchasable with a dollar at the average London price of silver, each year since 1873.

Calendar year.	Bullion value of a silver dollar.			Grains of pure silver at average price purchasable with a United States silver dollar.[a]
	Highest.	Lowest.	Average.	
1873	$1.016	$0.981	$1.004	369.77
1874	1.008	.970	.989	375.38
1875	.977	.941	.961	386.31
1876	.991	.792	.900	412.50
1877	.987	.902	.929	399.62
1878	.936	.839	.892	416.20
1879	.911	.828	.869	427.21
1880	.895	.873	.885	419.49
1881	.896	.862	.876	423.80
1882	.888	.847	.878	422.83
1883	.868	.848	.858	432.69
1884	.871	.839	.859	432.18
1885	.847	.794	.823	451.09
1886	.797	.712	.769	482.77
1887	.799	.733	.758	489.78
1888	.755	.706	.727	510.66
1889	.752	.711	.723	513.48
1890	.926	.740	.809	458.90
1891	.827	.738	.764	485.93
1892	.742	.642	.674	550.81
1893	.657	.517	.604	614.65
1894	.538	.457	.491	756.11
1895	.532	.461	.505	735.14
1896	.541	.504	.522	711.20
1897	.505	.400	.467	794.96
1898	.481	.424	.456	814.14
1899	.491	.451	.465	791.84
1900	.509	.463	.479	774.10
1901	.501	.423	.461	805.43
1902	.442	.367	.408	909.17
1903	.483	.368	.420	884.67

[a] 371.25 grains of pure silver are contained in a silver dollar.

Coinage value in gold of an ounce of fine silver at the ratios 1 : 15–1 : 40.

Ratio.	Value of an ounce of fine silver.	Ratio.	Value of an ounce of fine silver.	Ratio.	Value of an ounce of fine silver.
1 to 15	$1.3780	1 to 23	$0.8987	1 to 32	$0.6459
1 to 15½	1.3336	1 to 23½	.8796	1 to 32½	.6360
1 to 15.988 (United States ratio)	1.2929	1 to 24	.8613	1 to 33	.6264
1 to 16	1.2919	1 to 24½	.8437	1 to 33½	.6171
1 to 16½	1.2527	1 to 25	.8268	1 to 34	.6080
1 to 17	1.2159	1 to 25½	.8106	1 to 34½	.5992
1 to 17½	1.1811	1 to 26	.7950	1 to 35	.5906
1 to 18	1.1483	1 to 26½	.7800	1 to 35½	.5823
1 to 18½	1.1173	1 to 27	.7656	1 to 36	.5742
1 to 19	1.0879	1 to 27½	.7517	1 to 36½	.5663
1 to 19½	1.0600	1 to 28	.7382	1 to 37	.5587
1 to 20	1.0335	1 to 28½	.7253	1 to 37½	.5512
1 to 20½	1.0083	1 to 29	.7109	1 to 38	.5439
1 to 21	.9843	1 to 29½	.7007	1 to 38½	.5369
1 to 21½	.9614	1 to 30	.6890	1 to 39	.5300
1 to 22	.9396	1 to 30½	.6777	1 to 39½	.5233
1 to 22½	.9187	1 to 31	.6668	1 to 40	.5168
		1 to 31½	.6562		

Monetary systems and approximate stocks of money in the aggregate and

	Countries.	Monetary standard.	Monetary unit.	Population. 000 omitted.	Ratio between gold and full legal-tender silver.	Ratio between gold and limited-tender silver.	Stock of gold in banks and public treasuries. 000 omitted.
1	United States	Gold	Dollar	81,200	1-15.98	1-14.95	$859,000
2	Austria-Hungary	do	Crown	48,100	....	1-13.69	a 235,800
3	Belgium	do	Franc	6,900	1-15½	1-14.38	b 18,000
	British Empire:						
4	Australasia	do	Pound sterling	5,600	....	1-14.28	....
5	Canada	do	Dollar	5,400	....	1-14.28	50,000
6	Great Britain	do	Pound sterling	42,500	....	1-14.28	a 182,800
7	India	do	Pound sterling and rupee.	295,200	1-21.90	1-21.90	g 63,200
8	South Africa	do	Pound sterling	7,100	....	1-14.28	a 39,400
9	Straits Settlements f	Silver	Dollar	5,100	1-15½	1-14.38	....
10	Bulgaria	Gold	Lev	3,700	1-15½	1-14.28	c 1,400
11	Cuba	do	Peseta	1,600	....	1-14.88	18,000
12	Denmark	do	Crown	2,600	....	1-15.68	a 17,400
13	Egypt	do	Piaster	9,800	....	1-15.50	10,000
14	Finland	do	Mark	2,700	1-15½	1-14.38	c 4,100
15	France	do	Franc	39,000	....	1-13.95	a 458,900
16	Germany	do	Mark	56,400	1-15½	1-14.38	b 132,800
17	Greece	do	Drachma	2,400	1-15½	1-14.38	a 200
18	Haiti	do	Gourde	1,300	1-15½	1-14.38	a 1,000
19	Italy	do	Lira	33,000	....	1-28.75	a 116,400
20	Japan	do	Yen	48,400	1-15½	1-15.13	a 69,800
21	Netherlands	do	Florin	5,300	....	1-14.88	a 20,200
22	Norway	do	Crown	2,300	....	1-14.09	a 6,700
23	Portugal	do	Milreis	5,400	1-15½	1-14.38	a 5,200
24	Roumania	do	Leu	6,000	....	1-23.24	c 14,300
25	Russia	do	Ruble	130,900	1-15½	1-14.38	a 385,800
26	Servia	do	Dinar	2,600	1-15½	1-14.58	c 3,100
27	South American States.	do e	Peso	39,400	1-15½	1-14.38	a 91,800
28	Spain	do	Peseta	18,600	....	1-14.88	a 78,800
29	Sweden	do	Crown	5,200	1-15½	1-14.38	a 15,900
30	Switzerland	do	Franc	3,300	....	1-15.09	a 20,800
31	Turkey	do	Piaster	24,000	....	....	10,000
32	Central American States.	Silver h	Peso	4,200	....	....	a 1,900
33	China	do	Tael	330,100	1-16½	1-16½	....
34	Mexico	do	Peso	13,600	....	....	b 8,600
35	Siam	Gold	Tical	6,300	....	....	....
	Total	....	....	1,295,200	....	....	2,941,300

a Official information furnished through United States representatives.
b Estimate, Bureau of the Mint.
c L'Economiste Européen, January, 1903.
d C. Cramer Frey.

per capita in the principal countries of the world on December 31, 1903.

Stock of gold.		Stock of silver.			Uncovered paper.	Per capita.				
In circulation.	Total.	Full tender.	Limited tender.	Total.		Gold.	Silver.	Paper.	Total.	
000 omitted.	000 omitted.	000 omitted.	000 omitted.	000 omitted.	000 omitted.					
$461,400	$1,320,400	$572,200	$107,000	$679,200	$500,600	$16.26	$8.36	$6.17	$30.79	1
[a] 51,000	[a] 286,800	...	[a] 79,200	[a] 79,200	[a] 63,500	5.96	1.65	1.32	8.93	2
[b] 12,000	[b] 30,000	[b] 15,000	[b] 9,700	[b] 24,700	[b] 107,800	4.35	3.58	15.62	23.55	3
...	[a] 128,600	...	[a] 6,100	[a] 6,100	...	22.96	1.09	...	24.05	4
...	50,000	...	[a] 6,700	[a] 6,700	[a] 56,900	9.26	1.24	10.54	21.04	5
[a] 347,600	[a] 530,400	...	[a] 115,800	[a] 115,800	[a] 117,100	12.48	2.72	2.76	17.96	6
...	[g] 63,200	[a] 546,400	...	[a] 546,400	[a] 32,400	.21	1.85	.11	2.17	7
[a] 29,200	[a] 68,600	...	[a] 2,200	[a] 2,200	...	9.66	.31	...	9.97	8
...	...	[a] 13,800	[a] 3,200	[a] 17,000	[a] 4,100	...	3.33	.81	4.14	9
...	[c] 1,400	[b] 2,000	[c] 1,500	[c] 3,500	[c] 3,900	.38	.95	1.05	2.38	10
...	18,000	...	5,000	5,000	...	11.25	3.13	...	14.38	11
...	[a] 17,400	...	[a] 6,200	[a] 6,200	[a] 7,800	6.69	2.38	3.00	12.07	12
50,000	[b] 60,000	...	[a] 15,000	[a] 15,000	...	3.06	.65	...	3.71	13
...	[c] 4,100	...	[c] 600	[c] 600	[c] 9,600	1.52	.22	3.55	5.29	14
[b] 509,400	[b] 968,300	[a] 373,500	[a] 46,300	[a] 419,800	[a] 175,600	24.83	10.76	4.50	40.09	15
[b] 668,600	[b] 801,400	[a] 50,900	[a] 157,700	[a] 208,600	[a] 193,800	14.21	3.70	3.43	21.34	16
[a] 2,100	[a] 2,300	[a] 500	[a] 1,400	[a] 1,900	[a] 29,100	.96	.79	12.12	13.87	17
...	[a] 1,000	[a] 1,000	[a] 1,200	[a] 2,200	[a] 3,500	.77	1.69	2.69	5.15	18
[a] 24,700	[a] 141,100	[a] 16,000	[a] 20,800	[a] 36,800	[a] 177,900	4.28	1.11	5.39	10.78	19
...	[a] 69,800	...	[a] 29,400	[a] 29,400	[a] 58,300	1.44	.61	1.20	3.25	20
[a] 8,200	[a] 28,400	[a] 52,300	[a] 4,000	[a] 56,300	[b] 48,800	5.36	10.62	9.21	25.19	21
...	[a] 6,700	...	[a] 3,000	[a] 3,000	[a] 7,900	2.91	1.30	3.44	7.65	22
[a] 100	[a] 5,300	...	[a] 6,500	[a] 6,500	[a] 63,000	.98	1.20	11.67	13.85	23
...	[c] 14,300	...	[c] 600	[c] 600	[c] 19,800	2.38	.10	3.30	5.78	24
[a] 397,900	[a] 783,700	...	[a] 101,900	[a] 101,900	...	5.99	.78	...	6.77	25
...	[c] 3,100	...	[c] 1,700	[c] 1,700	[c] 2,700	1.19	.65	1.04	2.88	26
...	[a] 91,800	[a] 4,000	[a] 10,700	[a] 14,700	[a] 1,519,400	2.33	.37	39.32	42.02	27
...	[a] 78,800	...	[a] 173,700	[a] 173,700	[a] 139,300	4.24	9.34	7.49	21.07	28
[a] 3,200	[a] 19,100	...	[a] 7,000	[a] 7,000	[a] 29,700	3.67	1.35	5.71	10.73	29
[b] 9,400	[b] 30,200	...	[d] 10,700	[d] 10,700	[a] 19,900	9.15	3.24	6.03	18.42	30
40,000	[b] 50,000	[b] 30,000	[b] 10,000	[b] 40,000	...	2.08	1.67	...	3.75	31
...	[a] 1,900	[a] 3,100	...	[a] 3,100	[a] 32,500	.45	.74	7.74	8.93	32
...	...	[b] 345,800	...	[b] 345,800	...	...	1.05	...	1.05	33
...	[b] 8,600	[a] 48,900	...	[a] 48,900	[a] 54,000	.63	3.60	3.97	8.20	34
...	[b] 1,000	[a] 193,000	...	[a] 193,000	[a] 2,600	.16	30.63	.41	31.20	35
2,614,800	5,685,700	2,268,400	944,800	3,213,200	3,511,500	4.37	2.48	2.71	9.56	

[e] Except Bolivia.
[f] Includes Straits Settlements, the Malay States, Ceylon, and Johore.
[g] Report of head commissioner of paper currency.
[h] Except Costa Rica and British Honduras, gold-standard countries.

NOTE.—The value of the monetary stock of silver-standard countries has been changed to conform to the decline in silver values. The monetary stock of Mexico and other countries where the Mexican dollar circulates is given in Mexican dollars at bullion value.

Theoretical parities of the principal gold coins of the world.

Descriptive.	United States.	Russia.	England.	Latin Union.
	Dollar.	*Ruble.*	*Pound sterling.*	*Franc.* (a)
I. Gold dollar and cents of the United States. (1 gold dollar = 23.22 troy grains of fine gold; 5,760 troy grains = 373.24195 grams; hence a gold dollar = 1.504631611 grams of fine gold)....	1.00	0.5145673	4.866561	0.1929526
II. Russian ruble and kopecks. (1 ruble = $\frac{1}{15}$ of an imperial; 1 imperial = 261.36 doli, or 11.61351571875 grams of fine gold;b 1 ruble = 17.424 doli of fine gold)........	1.94337999	1.00	9.45758222	.37498022
III. English pence. (1 penny = $\frac{1}{240}$ of a pound sterling, and 1,869 pounds sterling = 40 troy pounds of gold, $\frac{11}{12}$, 0.916$\frac{2}{3}$ fine; 1 troy pound = 373.24195 grams; a sovereign (£1) = 7.32238532 grams of fine gold)........	49.316	25.376464	240	9.5157
IV. Francs and centimes. (The gold 20-franc piece contains $\frac{180}{31}$ grams of fine gold)........	5.18262	2.666807	25.22155	1.00
V. German Empire. Mark and pfennig. (1 crown or 10 marks contains $\frac{1000}{279}$ grams of fine gold).	4.19792	2.160113	20.429455	.81
VI. Netherlands. Florins and cents. (The 10-florin piece contains 6.048 grams of fine gold)..........	2.4878	1.2801494	12.1071186	.48003072
VII. Austria. Crowns and hellers. (1 crown = 100 hellers; 10 crowns contain 3.04878 grams of fine gold)........	4.93519247	2.5394891	24.0174277	.9522582
VIII. Portugal. (1 crown of 10 milreis = 16.257083$\frac{1}{3}$ grams of fine gold)........	.9255	476244	4.504	.178582
IX. Japan. Yen and sen. (20 gold yens = 16.6665 grams of gold 0.900 fine; 1 yen contains 0.7499925 grams of fine gold)........	2.006119915	1.0323228	- .76327806	.38710064

Descriptive.	German Empire.	Netherlands.	Austria.	Portugal.	Japan.
	Mark.	*Florin.*	*Crown.*	*Crown.*	*Yen.*
I. Gold dollar and cents of the United States. (1 gold dollar = 23.22 troy grains of fine gold; 5,760 troy grains = 373.24195 grams; hence a gold dollar = 1.504631611 grams of fine gold) ...	0.23821	0.402	0.20262634	10.8047	0.498455
II. Russian ruble and kopecks. (1 ruble = $\frac{1}{15}$ of an imperial; 1 imperial = 261.36 doli, or 11.61351571875 grams of fine gold;b 1 ruble = 17.424 doli of fine gold)........	.46293855	.78115879	.39377998	20.9976252	.9686892
III. English pence. (1 penny = $\frac{1}{240}$ of a pound sterling, and 1,869 pounds sterling = 40 troy pounds of gold, $\frac{11}{12}$, 0.916$\frac{2}{3}$ fine; 1 troy pound = 373.24195 grams; a sovereign (£1) = 7.32238532 grams of fine gold)........	11.74774	19.82305	9.99274373	532.84519	24.581907
IV. Francs and centimes. (The gold 20-franc piece contains $\frac{180}{31}$ grams of fine gold)........	$\left.\begin{matrix}1.2345679\\100.81\end{matrix}\right\}$	$\}$2.0832	1.050135	55.997	2.5833075
V. German Empire. Mark and pfennig. (1 crown or 10 marks contains $\frac{1000}{279}$ grams of fine gold)....	1.00	1.687392	.8506096	45.3572625	2.092179075
VI. Netherlands. Florins and cents. (The 10-florin piece contains 6.048 grams of fine gold)........	.5926305	1.00	.5040974	26.880098	1.24006696
VII. Austria. Crowns and hellers. (1 crown = 100 hellers; 10 crowns contain 3.04878 grams of fine gold)........	1.1756274	1.983744	1.00	53.323242	2.45997599
VIII. Portugal. (1 crown of 10-milreis = 16.257083$\frac{1}{3}$ grams of fine gold)....	.22047	.372022	1.8755355	10.00	.46133275
IX. Japan. Yen and sen. (20 gold yens = 16.6665 grams of gold 0.900 fine; 1 yen contains 0.7499925 grams of fine gold)........	.47790203	.80640806	.40650806	21.676327	1.00

a One Russian pound = 409.5124 grams.
b Or Italian lira, new drachma; Roumanian lei; Finnish mark, or Spanish peseta.